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69, Appli 2, Appli 2, Appli 69, Appli 13, Appli 13, Appli 2, Appli

513545 segs, 74649064 residues

Searched:

BLOSUM62 Gapop 10.0 , Gapext 0.5

Scoring table:

Perfect score:

Sequence:

OM protein - protein search, using sw model

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Run

US-10-629-516-2_COPY_10_193

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Issued Patents AA:*

Database

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Sequence 4, App
Sequence 2, App
Sequence 265, A
Sequence 2, App
Sequence 2, App
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Scott, Randal W.
APPLICANT: Scott, Marian N.
TITLE OF INVENTION: GENETICALLY ENGINEERED BPI VARIANT
TITLE OF INVENTION: PROTEINS
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSE: Fish & Richardson, P.C.
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY: User
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
OFENATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/915,720D
FILING DATE: 22-UL-1992
CLASSIFTCATION WIMBER: 36,513
ATTORNEY/AGENT INFORMATION:
REFERENCE/DOCKET NUMBER: 06514/030001
TELEPHONE: 415/95-0875
TELEPHONE: 415/95-0875
INFORMATION FOR SEQ ID NO: 16:
SEQUENCE CHARACTERISTICS:
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100.0%; Pred. No. 4.7e-70;
tive 0; Mismatches 0;
                                                                            US-08-209-762-69
US-08-644-290-2
US-08-93-8-28-2
US-08-927-438-2
US-08-927-438-2
US-08-274-304-69
US-08-274-302-2
US-08-274-302-2
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US-08-621-803-265
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US-08-704-504-2
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TYPE: amino acid
STRANDEDNESS: not relevant
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MOLECULE TYPE: protein
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Best Local Simi
Matches 184;
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Sequence 2, Appli
Sequence 2, Appli
Sequence 15, Appl
Sequence 15, Appl
Sequence 18, Appl
Sequence 2, Appli
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2, Appli
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                                                                                                                                                                                              October 21, 2005, 11:22:43; Search time 17.8241 Seconds (without alignments) 770.608 Million cell updates/sec
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Sequence 146
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1 CNAPRWVSLMVLVAIGTAVT.......HVHISKSKVGWLIQLFHKKI 184
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Sequence 1
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/cgn2_6/ptodara/1/iaa/5B_COMB.pep:*
/cgn2_6/ptodara/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodara/1/iaa/6B_COMB.pep:*
/cgn2_6/ptodara/1/iaa/PCTUS_COMB.pep:*
/cgn2_6/ptodara/1/iaa/PCTUS_COMB.pep:*
                                   GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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US-09-949-016-9146
US-08-218-026-2
US-08-218-026-2
US-09-025-543-15
US-09-025-543-15
US-09-025-543-15
US-08-013-801-2
US-08-013-801-2
US-08-113-2
US-08-111-614-69
US-08-311-614-69
US-08-311-611A-146
US-08-311-611A-146
US-08-311-611A-146
US-08-311-611A-146
US-08-311-611A-146
US-08-311-611A-146
US-08-313-568-2
US-08-313-568-2
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US-08-313-568-2
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US-08-306-473A-146
US-08-430-417-2
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SUMMARIES

Query Match Length DB

Result

9 69

Sequence

Gaps

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i Sequence 9146, Application US/09949016

patent No. 6812339
i GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF;
FILE REPRENCE: CLOOL307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR PILING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: PSELEGE for Windows Version 4.0
SEQ ID NO 9146
LENGTH: 262
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   33 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISOKGLDYASQOGTAALOKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Gray, Beulah
APPLICANT: Haseman, Judith R.
APPLICANT: Haseman, Judith R.
APPLICANT: Mayo, Kevin
TITLE OF INVENTION: Synthetic Peptides with Bactericidal
TITLE OF INVENTION: Activity and Endotoxin Neutralizing Activity fo.
TITLE OF INVENTION: Activity and Endotoxin Neutralizing Activity fo.
TITLE OF INVENTION: Activity and Endotoxin Neutralizing Activity fo.
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant & Gould
STREET: 3100 No. 5786324west Center
STREET: MN
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100.0%; Score 943; DB 4; Length 262;
Best Local Similarity 100.0%; Pred. No. 5.1e-70;
Matches 184; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/08218026
Patent No. 5786324
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                                                                                          KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
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DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
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                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Scott, Randal W.
APPLICANT: Marra, Marian N.
TITLE OF INVENTION: GENETICALLY ENGINEERED BPI VARIANT
TITLE OF INVENTION: PROTEINS
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bozicevic & Reed, LLP
STREET: 285 Hamilton, Suite 200
CITY: Palo Alto
STATE: CA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MUDIUM TYPE: Floppy disk
MUDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/025,543
FILING DATE: Herewith
CLASSIFICATION:
ATTONERS/AGENT INFORMATION:
NAME: Francis, Carol L.
REGISTRATION NUMBER: 36,513
REFERENCE/DOCKET VUMBER: 06514/030005
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/327-3400
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650/327-3400
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TELEPHONE: 650/327-3400
SEQUENCE CHARACTERISTICS:
FENERAL CARACTERISTICS:
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100.0%; Pred. No. 4.7e-70;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                       Sequence 16, Application US/09025543; Sequence 16, Application US/09025543; Patent No. 6093801; GENERAL INFORMATION:
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STRANDEDNESS: not relevant
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Best Local Similarity
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10 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 129
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Sequence 15, Application US/07915720D

GENERAL INFORMATION:
APPLICANT: Scott, Randal W.
APPLICANT: Scott, Marian N.
TITLE OF INVENTION: GENETICALLY ENGINEERED BPI VARIANT
TITLE OF INVENTION: PROTEINS
TITLE OF INVENTION: PROTEINS
TITLE OF INVENTION: PROTEINS
TORRESPONDENCES: 2
CORRESPONDENCES: 2
STREET: 2200 Sand Hill Road, Suite 100

CITY: Menlo Park
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Patentin Release #1.0, Version #1.30 SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/915,720D
FILING DATE: 22-JUL-1992
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Francis, Carol L.
REGISTRATION NUMBER: 36,513
REFRENCE/DOCKET UNMBER: 06514/030001
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: CA
COUNTRY: USA
ZIP: 94022.
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
TELECOMMUNICATION INFORMATION:
TELEPHONE: 612/371-5268
TELEFAX: 612/332-9081
                                                                                                  INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 300 amino acids TYPE: amino acid
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                            ANTI-SENSE: NO
FRAGMENT TYPE: internal
ORIGINAL SOURCE:
                                                                                                                                                                                                          single
                                                                                                                                                                                                                                                    MOLECULE TYPE: protein HYPOTHETICAL: NO
                                                                                                                                                                                                                                  TOPOLOGY: linear
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US-07-915-720D-15
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APPLICANT: GRAY, Beulah
APPLICANT: HASEMAN, Judith R.
APPLICANT: HASEMAN, Judith R.
APPLICANT: MAYO, Kevin
TITLE OF INVENTION: PEPTIDES WITH BACTERICIDAL AND ENDOTOXIN NEUTRALIZING
NUMBER OF SEQUENCES: 66
CORRESPONDENCE ADDRESS:
ADDRESSEE: Merchant, Gould, Smith, Edell, Welter & Schmidt
STREET: 3100 No. 5830860west Center, 90 South Seventh St
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 129
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COMPUTER READABLE FORM:

MEDIUM TYEE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FeatSEQ Version 1.5
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/653,632
FILING DATE: 24-MAY-1996
CLASSIFICATION SI4
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/218026
FILING DATE: 24-MAY-1996
CLASSIFICATION NUMBER: 08/218026
FILING DATE: 24-MAY-1994
ATTONNEY/AGENT INFORMATION:
NAME: Kettelberger, Denise M
REGISTRATION NUMBER: 33,924
REFERENCE/DOCKET NUMBER: 600.286USII
                  PELLICATION NUMBER: US/08/218,026
FILING DATE: 24-MAR-1994
CLASSIPICATION: S14
ATTORNEY/AGENT INFORMATION:
NAME: KOWALCHON:
REGISTRATION NUMBER: 36,848
REFERENCE/DOCKET NUMBER: 36,848
TELEPOMUNICATION NUMBER: 00.286US01
TELEPHONE: 612-332-9081
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 300 amino acids
TYPE: amino acid
MOLECULE TYPE: protein
US-08-218-026-2
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Patent No. 5830860
  CURRENT APPLICATION DATA:
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STATE: MN
COUNTRY:
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Therapeutic uses of Bactericidal/Permeability-Increasing Protein Products
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                   CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 60
                                          10 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 69
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: MCCarthy, Sean A
APPLICANT: MCCarthy, Sean A
APPLICANT: Barnes, Thomas M
APPLICANT: Barnes, Thomas M
APPLICANT: Share, Christopher C
APPLICANT: Share, John D
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING DIAGNOSTIC,
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING DIAGNOSTIC,
FILE REPERENCE: 210147,0023/6/11
CURRENT APPLICATION NUMBER: US/09/578,063
CURRENT FILING DATE: 2000-05-24
PRIOR FILING DATE: 1999-06-14
NUMBER OF SEQ ID NOS: 79
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Patent No. 5348942

GENERAL INFORMATION:
APPLICANT: Little, Roger G. II
APPLICANT: Gazzano-Santoro, Helene
APPLICANT: Parent, James Brian
ITILE OF INVENTION: Bactericidal/Perm
                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 38, Application US/09578063
Patent No. 6764677
GENERAL INFORMATION:
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Best Local Similarity 100.0
Matches 184; Conservative
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SEQ ID NO 38
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                                                                                                                                                                                                                                                                                                             DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
                                                                                                                                                                                                                                                                                                                                                                                           KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
                                                                                                                                                                                                                                                 10 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQCTAALQKELKRIKIPDYS 69
                                                                                                                                                                                                                              1 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISOKGLDYASQQGTAALQKELKRIKIPDYS
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                                                                                                                                            Length 368;
                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15, Application US/09025543
Patent No. 6093801
CENERAL INFORMATION:
APPLICANT: Scott, Randal W.
APPLICANT: Marra, Marian N.
TITLE OF INVENTION: GENETICALLY ENGINEERED BPI VARIANT
TITLE OF INVENTION: PROTEINS
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS:
ADDRESSEE: 285 Hamilton, Suite 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IS Floppy disk

COMPUTER: IBM PC compatible

SOFTWARE: Patentin Release #1.0, Version #1.30

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/025,543

FILING DATE: Herewith

CLASSIFICATION:

NAME: Francis, Carol L.

REGISTRATION NUMBER: 36,513

REFERENCE/DOCKET NUMBER: 36,513

REFERENCE/DOCKET NUMBER: 06514/030005

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:
                                                                                                                                        Query Match
Best Local Similarity 100.0%; Pred. No. 7.3e-70;
Matches 184; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 285 Hamilton, Suite 200 CITY: Palo Alto
LENGTH: 368 amino acids
TYPE: amino acid
STRANDEDNESS: not relevant
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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Best Local Similarity 100.
Matches 184; Conservative
                                                       TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULE TYPE: protein US-09-025-543-15
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US-09-025-543-15
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DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
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                                              CAPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Floppy disk
COMPUTER: EM PC Compatible
COMPUTER: EM PC Compatible
CORPATER: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/013,801
FILING DATE: 02 FEB 193
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: MAYER'S, Thomas C.
REGISTRATION NUMBER: P-36,989
REFERENCE/POCKET NUMBER: 27129/30911
TELECOMMULICATION INFORMATION:
TELECOMMULICATION INFORMATION:
TELECOMMULICATION INFORMATION:
TELEFRA: 312/346-5750
TELEFRA: 312/346-5750
THELEFRA: 312/346-9740
                                                                                                                                                                                                                                                                                                                                                                    TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                            : 487 amino acids
amino acid
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Matches 184; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 HKKI 184
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                                      60603
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US-08-013-801-2
                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
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Patent No. 5420019

GENERAL INFORMATION:

APPLICANT: Theofan, Georgia
APPLICANT: Burke, David
APPLICANT: The OF INVENTION: Stable Bactericidal/Permeability-
TITLE OF INVENTION: Compositions Containing the Same
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100.0%; Pred. No. 9.9e-70;
tive 0; Mismatches 0; Indels (
                                        E: Marshall, O'Toole, Gerstein, Murray & Borun 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                           COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
SPETATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CLASSIFICATION NUMBER: US/08/030,644
FILING DATE: 19930312
CLASSIFICATION NUMBER: 318.79
REFERENCE/DOCKET NUMBER: 312.9
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION OF SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & ADDRESSEE: Bicknell
STREET: Two First National Plaza
CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 100.
Best Local Similarity 100.
Matches 184; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: protein
                    CORRESPONDENCE ADDRESS: ADDRESSE: Marshall,
    NUMBER OF SEQUENCES:
                                                                        CITY: Chicago
STATE: Illinois
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 HKKI 184
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                                                            STREET:
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INFORMATION FOR SEQ ID NO: 2:
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
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; Patent No. 5447913
; GENERAL INFORMATION:
    APPLICANT: Little, Roger G.
    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
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COUNTRY: United States of America
ZUP: 60606-6402
COMPUTER READBLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/212,132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
100.0%; Score 943; DB 1;
Best Local Similarity 100.0%; Pred. No. 9.9e-70;
Matches 184; Conservative 0; Mismatches 0;
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                       CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Meyers Thomas 6, 989
REGISTRATION NUMBER: 36,989
REFERENCE/DOCKET NUMBER: 36,989
TELECOMMUNICATION INFORMATION:
TELEFAX: 312/474-6300
TELEFAX: 312/474-6300
TELEFAX: 312/474-6300
TELEFAX: 35-3856
INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
TYPE: AMINO ALID
TOPOLOGY: linear
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CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
REFERENCE/DOCKET NUMBER: 2712:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-6448
   19930519
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TELEFAX: 312/47/
TELEX: 25-3856
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70 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 129
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                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.0%; Pred. No. 9.9e-70;
Matches 184; Conservative 0; Mismatches 0; Indels
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| Sequence 2. Application US/08414924
| Patent No. 5494896
| GENERAL INFORMATION:
| APPLICANT: Hansbrough, John F.
| TITLE OF INVENTION: Method of Treating Conditions
| TITLE OF INVENTION: Method of Treating Conditions
| TITLE OF INVENTION: Associated With Burn Injuries
| NUMBER OF SEQUENCES: 2
| CORRESPONDENCES: 2
| CORRESPONDENCES: Barshall, O'Toole, Gerstein, Murray & ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & ADDRESSEE: Barn
| STREET: Galo Sears Tower, 233 South Wacker Drive CITY: Chicago
| STREET: Illinois STREET: Illinois STREET: Glo606-6402
| COMPUTER: READABLE FORM: MEDIUM TYPE: Ploppy disk
| COMPUTER: IBW PC Compatible COMPUTER: IBW PC Compatible COMPUTER: IBW PC Compatible COMPUTER: IBW PC COMPARE: Ploppy disk SOFFWARE: Ploppy disk DISK DISK SOFFWA
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/414,924
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
REFERENCE/DOCKET NUMBER: 27129/32297
TELECOMMUNICATION INFORMATION:
TELEFAX: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  : 487 amino acids
amino acid
                                                1: 487 amino acids
amino acid
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS
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                                                                                                                                  TOPOLOGY: linear
MOLECULE TYPE: protein
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61 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
                                                                                                                                                                         70 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 129
                                                                                                                                                                                                                                                       121 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF
                                                                1 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Cohen, Jonathan
APPLICANT: Kung, Ada H.C.
APPLICANT: Lambert, Jr., Lewis H.
TITLE OF INVENTION: Method for Treating Gram-Negative Bacterial
TITLE OF INVENTION: Infection by Administration of
TITLE OF INVENTION: Bactericidal/Permeability-Increasing
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 227
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                    Indels
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/311,611A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Score 943; DB 1;
100.0%; Pred. No. 9.9e-70;
tive 0; Mismatches 0;
Best Local Similarity 100.0%; Pred. No. 9.9e-70; Matches 184; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 146, Application US/08311611A
Patent No. 5523288
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/23,401
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/125,651
FILING DATE: 2-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 146:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 32
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . 487 amino acids
amino acid
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312/474-0448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLECULE TYPE: protein
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                          HKKI 184
                                                                                                                                                                                                                                                                                                                                                                    190 HKKI 193
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                                                                                                                                                       KWSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
                                                                                                                                                                                                                                            KASGNPDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 189
                                                                     10 CNAPRHVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 69
                                            CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Cohen, Jonathan
APPLICANT: Cohen, Jonathan
APPLICANT: Cohen, Jonathan
APPLICANT: Kung, Ada H.C.
APPLICANT: Lambert, Jr., Lewis H.
TITLE OF INVENTION: Method for Treating Gram-Negative Bacterial
TITLE OF INVENTION: Infection by Administration of
TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 227
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
CITY: Chicago
CITY: Lininois
      0; Gaps
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  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/311,611A
      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/273,401
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/125,651
FILING DATE: 22-SEP-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 69, Application US/08311611A
Patent No. 5523288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
REPERENCE/DOCKET NUMBER: 3225:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 69:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc feature;
CTHER INFORMATION: "rBPI"
US-08-311-611A-69
    184; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                HKKI 193
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US-08-311-611A-69
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STATE: Il
COUNTRY:
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Gaps

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        Qy
        1 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISOKGLDYASQCGTAALQKELKBIKIPDYS 60

        Db
        10 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISOKGLDYASQCGTAALQKELKRIKIPDYS 69

        Qy
        61 DSFKIKHLGKGHYSFYSMDIRBFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120

        Db
        70 DSFKIKHLGKGHYSFYSMDIRBFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 129

        Qy
        121 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVVHISKSKVGWLIQLF 180

        Db
        130 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVVHISKSKVGWLIQLF 189

        Qy
        181 HKKI 184

        Pb
        190 HKKI 193
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Search completed: October 21, 2005, 11:32:58 Job time : 18.8241 secs

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COUNTRY: USA
ZIP: 6066-6402
COMPUTER RADABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/072,063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     , DB 1;
9.9e-70;
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100.0%; Pred. No. 9.9
ative 0; Mismatches
                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-
                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 312/346-9/40
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 487 amino acids
TYPE: amino acid
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 100.
Matches 184; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  , MOLECULE TYPE: protein US-08-013-801-2
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STATE: Illlinois
Illinois
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; Sequence 2, Application US/08013801
; Patent No. 5420019
; GENERAL INFORMATION:
APPLICANT: Theofan, Georgia
APPLICANT: Burke, David
APPLICANT: Baltaian, Manik
APPLICANT: Grinna, Lynn Stable Bactericidal/Permeability-
TITLE OF INVENTION: Increasing Protein Products and Pharmaceutical
TITLE OF INVENTION: Compositions Containing the Same
NUMBER OF SEQUENCES: 14
CORRESPONDENCE ADDRESS:
ADDRESSEE: Bicknell, O'Toole, Gerstein, Murray &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
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                      CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                STATE: Chicago
STATE: 111inois
COUNTRY: Chicago
CONTRY: 111inois
COUNTRY: 111inois
COUNTRY: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: Floppy disk
COMPUTER: Floppy disk
COMPUTER: Floppy disk
COMPUTER: TEM PC compatible
CONFERNING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAtentin Release #1.0, Version #1.25
CURRENT APPLICATION NOWBER: US/08/030,644
FILING DATE: 19930312
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Shart V Jeffery S.
REGISTRATION NUMBER: 31,879
REGISTRATION NUMBER: 31,879
TELECOMMUNICATION INFORMATION:
TELEFAK: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Two First National Plaza
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INFORMATION FOR SEQ ID NO: 2: SEQUENCE CHARACTERISTICS: LENGTH: 487 amino acids TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 184; Conservative
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MOLECULE TYPE: protein
US-08-030-644-2
      NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
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61 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
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| Patent No. 5439807
| GENERAL INFORMATION:
| APPLICANT: Theofan, Georgia APPLICANT: Grinna, Lynn S
| APPLICANT: Horvitz, Arnold APPLICANT: OF INVENTION: BPI-Immunoglobulin Fusion Proteins NUMBER OF SEQUENCES: 18
| CORRESPONDENCE ADDRESS: ABSTRAIL O'TOOle, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
OFFWARMING SISIEM: E-LOSIMS-LOS SOFTWARE: Patentin Release #1.0, Version #1.25 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/013,801 FILING DATE: US/08/013,801 FILING DATE: US/08/13,801 FILING DATE: US/08/13,801 FILING DATE: US/08/13,801 FILING DATE: US/08/109/13,801 FILING DATE: US/08/109/13,801 FEBRENCE/DOCKET NUMBER: 27129/30911 TELEPRANICATION INFORMATION: TELEPRANICATION INFORMATION: TELEPRANICATION: 312/346-5750 TELEPRAN: 312/346-5740
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October 21, 2005, 11:22:43; Search time 47.1759 Seconds (without alignments) 770.608 Million cell updates/sec
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2507
1 MRENMARGPCNAPRWVSLMV.........NVVLQPHQNFLLFGADVVYK 487
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                         OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Sequence:
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Total number of hits satisfying chosen parameters: Minimum DB seq length: 0 Maximum DB seq length: 200000000

513545 segs, 74649064 residues

Searched:

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

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/cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
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/cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PcTUS_COMB.pep:*
/cgn2_6/ptodata/1/iaa/PcTUS_COMB.pep:* Issued Patents AA:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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|---------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|--------------------|-----------------|-----------------|------------------|-------------------|------------------|-------------------|-----------------|-----------------|-----------------|-------------------|--------------------|-----------------|-----------------|-----------------|-------------------|------------------|-----------------|-----------------|----------|------------------|
| | Appli | Appli | Appli | Appli | Appli | , Appl | 5, App | Appli | М, | ~ | ທີ | _ | 6, App | Appli | Appli | App1 | , Appl | 6, Apg | Appli | Appli | Appli | , Appl | | App1 | Appli | | |
| g | | 7 | 7 | 7 | 7 | 69 | 146 | 7 | 7 | 69 | 146 | 69 | 14 | 7 | 'n | 7 | 69 | 146 | 'n | 7 | ď | • • | _ | 'n | 7 | ~ | 69 |
| Description | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Seguence | Sequence | Sequence | Sequence | Sequence |
| QI. | US-08-030-644-2 | US-08-013-801-2 | US-08-072-063-2 | US-08-212-132-2 | US-08-414-924-2 | US-08-311-611A-69 | US-08-311-611A-146 | US-08-173-968-2 | US-08-232-527-2 | US-08-372-783-69 | US-08-372-783-146 | US-08-372-105-69 | US-08-372-105-146 | US-08-415-158-2 | US-08-064-693-2 | US-08-291-112-2 | US-08-306-473A-69 | US-08-306-473A-146 | US-08-430-417-2 | US-08-557-287-2 | US-08-470-366-2 | US-08-261-660A-12 | US-08-209-762-69 | US-08-644-290-2 | US-08-378-228-2 | , | US-08-473-344-69 |
| DB | - | - | ч | н | - | - | H | H | - | ٦ | ٦ | Н | Н | - | н | - | Н | - | - | ٦ | - | - | н | - | ٦ | н | ٦ |
| Length DB | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 |
| * Query Match | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Score | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 |
| Result No. | | 8 | m | 4 | Ŋ | 9 | 7 | 60 | o, | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

| , H 20 | Sequence 2, Appli Sequence 2, Appli Sequence 265, App Sequence 2, Appli | Sequence 2, Appli Sequence 69, Appl Sequence 146, App | Sequence 252, App Sequence 2, Appli Sequence 2, Appli | Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli | Sequence 2, Appli Sequence 2, Appli |
|---|--|---|---|---|--|
| US-08-274-303-2 US-07-915-720D-13 US-08-435-855-2 | US-08-466-822-2 US-08-466-624-2 US-08-621-803-265 US-08-466-826-2 | US-08-704-504-2 US-08-485-445A-69 US-08-485-445A-146 | US-08-621-259A-252 US-08-586-133-2 US-09-063-465-2 | US-08-862-785A-2 US-09-081-166-2 US-09-203-159-2 | US-09-099-725-2 US-08-756-164-2 |
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| 3038 | 33 33 34 34 | 35 37 37 | 8 6 4 8 6 0 | 4 4 4 4 5 6 | 44 |

ALIGNMENTS

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Sequence 2, Application US/08030644
; Patent No. 5348942
; GENERAL INFORMATION:
    APPLICANT: Little Roger G. II
    APPLICANT: Parent, James Brian
    TITLE OF INVENTION: Bactericidal/Permeability-Increasing Protein Products
    TITLE OF SEQUENCES: 2
    CORRESPONDENCE ADDRESS:
    ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun
    STREET: 6300 Sears Tower, 233 South Wacker Drive
    CITY: Chicago
    STATE: Illinois
    STATE: Illinois
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CURRENT APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: - 193930312
CLASSIFICATION: 514
ATTONEY/AGENT INPOMMATION:
NAME: Sharp, Jofffrey S:
REGISTRATION NUMBER: 31,879
REGISTRATION NUMBER: 31,879
TELECOMMULICATION INPORMATION:
TELECOMMULICATION INPORMATION:
TELECOMMULICATION INPORMATION:
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100.0%; Pred. No. 6.6e-209;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                       ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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TYPE: AMINO ACID
TOPOLOGY: linear
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Best Local Similarity 100.
Matches 487; Conservative
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INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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US-08-030-644-2
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RESULT 3
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Sequence 2, Application US/08013801
Sequence 2, Application US/08013801
Sequence 3, Application US/08013801
Sequence 3, Application US/08013801
Sequence 3, Application US/08013801
Sequence 4, Area of Area o
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STREET: Two First National Plaza
CITY: Chicago
STATE: 1111nois
COUNTRY: USA
ZIP: 60603
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/013,801
FILING DATE: 02 FEB 1993
CLASSIFICATION: 424
ATTONEY/AGENT INFERMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & ADDRESSEE: Bicknell
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REGISTRATION NUMBER: P-36,989
REPERENCE/DOCKET NUMBER: 27128
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/346-5750
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TELEX: 25-3856
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South Wacker
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APPLICANT: Theofan, Georgia
APPLICANT: Grinna, Lynn S
APPLICANT: Grinna, Lynn S
APPLICANT: Grinna, Lynn S
APPLICANT: Horwitz, Arnold
TITLE OF INVENTION: BPI-Immunoglobulin Fusion Proteins
NUMBER OF SEQUENCES: 18
CORRESPONDENCES ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Born
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYEE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/072,063
                                                                                                                                                         100.0%; Score 2507; DB 1;
100.0%; Pred. No. 6.6e-209;
:Ive 0; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 2, Application US/08072063; Patent No. 5439807
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                                   LENGTH: 487 amino acide
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
                                                                                                                                                         Query Match
Best Local Similarity 100.
Matches 487; Conservative
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS
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STATE: Illlinois
COUNTRY: USA
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Best Local Similarity 100.
Matches 487; Conservative
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Illinois
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US-08-212-132-2
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APPLICANT: Little, Roger G.
APPLICANT: Little, Roger G.
APPLICANT: Ammons, William Steve
APPLICANT: Ammons, William Steve
TITLE OF INVENTION: Increasing Protein Dimer Products
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
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                                                                                                                                                                                                                                                                              DB 1; Length 487;
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                                                                                                                                                                                                                                                                           100.0%; Score 2507; DB 1;
100.0%; Pred. No. 6.6e-209;
Live 0; Mismatches 0;
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           CLASSIFICATION: 435
ATORNEY/AGENT INFORMATION:
NAME: Meyers Thomas 76,989
REGISTRATION NUMBER: 36,989
REFRENCE/DOCKET NUMBER: 3065;
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-6448
                                                                                                                     TELEFAX: 312/474-0448
TELEX: 25-3856
INPORMATION POR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                             Matches 487; Conservative
 FILING DATE: 19930519
                                                                                                                                                                                                                              , MOLECULE TYPE: protein US-08-072-063-2
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GADVVYK 487
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US-08-212-132-2
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Best Local 3
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241 VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 300
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                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: Patentin Release #1.0, Version #1.25
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/212,132
FLING DATE:
CLASSIFICATION: 514
ATTORNEY/AGRIT INFORMATION:
NAME: Sharp Jeffrey S.
REGISTRATION NUMBER: 31,879
REFERENCE/DOCKET NUMBER: 27129/31735
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEFAX: 312/474-0448
TELERX: 25-3856
TELEX: 25-3856
RY: United States of America 60606-6402
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US-08-414-924-2
'Sequence 2, Application US/08414924
'Patent No. 5494896
                                                                                                                                                                                                                                                                                                                                                                                            TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
TYPE: amino acid
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300

180

9

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COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                      Sequence 69, Application US/08311611A
Patent No. 5523288
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OTHER INFORMATION: "rBPI"
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INFORMATION FOR SEQ ID NO: 6 SEQUENCE CHARACTERISTICS: LENGTH: 487 amino acids TYPE: amino acid
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STATE: Illinois
COUNTRY: USA
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy di
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                                       481 GADVVYK 487
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GENERAL INFORMATION:

APPLICANT: Hansbrough, John F.

TITLE OF INVENTION: Method of Treating Conditions
TITLE OF INVENTION: Associated With Burn Injuries
NUMBER OF SEQUENCES: 2
CORRESPED BORN
ADDRESSE: Marshall, O'Toole, Gerstein, Murray &
ADDRESSE: Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: 1111nois
COUNTRY: United States of America
ZIP: 6606-6402
COMPUTER READALE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: BM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/414,924
FILING DATE:
FLING DATE:
TELECOMMUNICATION INFORMATION:
NAME: Sharp, Jaffrey S:
REGISTRATION NUMBER: 31,879
REFERENCE/DOCKET NUMBER: 27129/32297
TELEROMONICATION INFORMATION:
TELEROMONICATION INFORMAT
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INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
TYPE: amino acid
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Matches 487; Conservative
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KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS 180
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GENERAL INFORMATION:
APPLICANT: Cohen, Jonathan
APPLICANT: Cohen, Jonathan
APPLICANT: King, Ada H.
APPLICANT: Lambert, Jr., Lewis H.
TITLE OF INVENTION: Method for Treating Gram-Negative Bacterial
TITLE OF INVENTION: Infection by Administration of
TITLE OF INVENTION: Bactericidal/Permeability-Increasing
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 227
CORRESPONDENCE ADDRESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .,
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SOFTWARE PATENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/311,611A
FILING DATE:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/273,401
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/125,651
FILING DATE: 2-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: Shart, Jeffrey S.

REGISTRATION NUMBER: 31,879
REGISTRATION NUMBER: 31,879
REFERENCE/OMMUNICATION INFORMATION:

NAME: 31,879
REFERENCE/OMCKET NUMBER: 32251
TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:
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100.0%; Score 2507; DB 1;
Best Local Similarity 100.0%; Pred. No. 6.6e-209;
Matches 487; Conservative 0; Mismatches 0;
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; TOPOLOGY: linear
; MOLECULE TYPE: protein
US-08-311-611A-146

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GADVVYK 487
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                                                                                                   YQEAGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360
                                                                                                                                                           PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK 420
                           PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Cohen, Jonathan
APPLICANT: Cohen, Jonathan
APPLICANT: Kung, Ada H.C.
APPLICANT: Lambert, Jr., Lewis H.
TITLE OF INVENTION: Method for Treating Gram-Negative Bacterial
TITLE OF INVENTION: Infection by Administration of
TITLE OF INVENTION: Bactericidal/Permeability-Increasing
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 227
CORRESPONDENCE ADDRESS:
Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: Chicago
STATE: 11linois
CONTRY: USA
ZIP: 6606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/311,611A
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/273,401
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/125,651
FILING DATE: 22-SEP-1993
ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 146, Application US/08311611A Patent No. 5523288 GENERAL INFORMATION:
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INFORMATION FOR SEQ ID NO: 146:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
TYPE: amino acid
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TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEPAX: 312/474-0448
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GADVVYK 487
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US-08-311-611A-146
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Sequence 2, Application US/08173968

Sequence 2, Application US/08173968

Patent No. 5576292

Patent No. 5576292

Patent No. 5576292

Patent No. 5576292

APPLICANT: Weiss, Jerrold

TITLE OF INVENTION: Biologically Active

TITLE OF INVENTION: Bactericidal/Permeability-increasing Protein Fragments

NUMBER OF SEQUENCES: 7

CORRESPONDENCE ADDRESS:

ADDRESSEE: Howard M. Frankfort

STREET: 805 Third Ave.
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Length 487;
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COMPUTER READABLE FORM:

MEDIUM TYPE: Floppd disk

COMFUTER: IBM PC compatible

COMFUTER: BATCHING.SYSTEM: PC-DOS/MS-DOS

SOFTWARE: PatentIn Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/173,968

FILING DATE:

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 07/754,204
; Score 2507; DB 1;
; Pred. No. 6.6e-209;
0; Mismatches 0;
  Query Match

Best Local Similarity 100.0%;

Matches 487; Conservative 0
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487
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Method of Treating Conditions Associated with
Intestinal Ischemia/Reperfusion
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                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 2507; DB 1; Length 487; 100.0%; Pred. No. 6.6e-209; tive 0; Mismatches 0; Indels 0
         CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Frankfort, Howard M.
REGISTRATION NUMBER: 32,613
REFERENCE/DOCKET NUMBER: 5969/05982US1
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 527-7700
TELEFAX: (212) 527-7700
TELEFAX: (212) 753-6237
TELEX: 236687
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens
TISSUE TYPE: blood
CELL TYPE: promyelocytic leukemia cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2, Application US/08232527; Patent No. 5578568; GENERAL INFORMATION: APPLICANT Ammons, William Stewmart OF INVENTION: Method of Title OF INVENTION: Intestinal
26-AUG-1991
                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 100. Matches 487; Conservative
                                                                                                                                                                                                                         MOLECULE TYPE: protein uvPorHETICAL: YES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GADVVYK 487
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                                                                                                                                                                                                                                                             ANTI-SENSE: NO
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US-08-232-527-2
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121 KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS 180
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NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marchi, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/232,527
FILING DATE:
CLASSIFICATION NUMBER: 31.879
REFERENCE/DOCKET NUMBER: 31.879
REGISTRATION NUMBER: 31.879
REGISTRATION NUMBER: 31.879
REFERENCE/DOCKET NUMBER: 31.879
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
TENETH OF THE TABLE OF THE TA
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100.0%; Pred. No. 6.6e-209;
iive 0; Mismatches 0;
                                                                                                                          STREET: 6300 Sears Tower, 233 Sout CITY: Chicago STATE: 111inois COUNTRY: United States of America IP: 60606-6402
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Best Local Similarity 100.
Matches 487; Conservative
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420

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241 VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 300
                                                                                                                                                         301 YQEAGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360
                                                                                                                                                                                                                        361 PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK 420
                                                                                                                                                                                                                                                                                                            421 HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF 480
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181 KVGWLIQLFHKKIESALRNKANSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL 240
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                                       241 VAPPATTABILDVOMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV
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Patent No. 5578572

GENERAL INPORMATION:
APPLICANT: Horwitz, Arnold H.
APPLICANT: Little, Roger G.
TITLE OF INVENTION: Anti-Gram-Positive Bacterial Methods and TITLE OF INVENTION: Materials
NUMBER OF SEQUENCES: 237

CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive
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APPLICATION NUMBER: US/08/372,783 FILING DATE:
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC COMPACIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release.
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APPLICATION NUMBER: 08/273,540
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATE: 08/183,222
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FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Rin-Laures, Li-Heien
REGISTRATION NUMBER: 33,547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELECOMMUNICATION INFORMATION
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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US-08-372-783-146
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                                                            Sequence 69, Application US/08372783
Patent No. 5578572
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Lambert, Lewis H.
APPLICANT: Little, Roger G.
TITLE OF INVENTION: Anti-dram-Positive Bacterial Methods and TITLE OF INVENTION: Materials
NUMBER OF SEQUENCES: 237
CORRESPONDENCE ADDRESS:
ADDRESSEE: Material, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Score 2507; DB 1; Length 487; 100.0%; Pred. No. 6.6e-209; ive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                  ZIP: 60606-6402
ZIP: READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/372,783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Rin-Laures, Li-Hsien
REGISTRATION NUMBER: 33,547
REFREENCE/DOCKET NUMBER: 27129/32415
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/273,540
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/183,222
FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
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INFORMATION FOR SEQ ID NO: 69:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ) OTHER INFORMATION: "rBPI"
US-08-372-783-69
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Best Local Similarity 100.
Matches 487; Conservative
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MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                   CITY: Chicago
STATE: Illinois
                                                                                                                                                                                                                                                                                                                                                                             USA
                       RESULT 10
US-08-372-783-69
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61 KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MRENWARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 487;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
100.0%; Score 2507; DB 1;
Best Local Similarity 100.0%; Pred. No. 6.6e-209;
Matches 487; Conservative 0; Mismatches 0;
FILING DATE: 11-MAR-1994

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/183,222
FILING DATE: 14-JAN-1994
ATTORNEY/AGENT INFORMATION:
NAME: Rin-Laures, Li-Hsien
REGISTRATION NUMBER: 33,547
REFERENCE/DOCKET NUMBER: 27129/32415
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION FOR SEQ ID NO: 69:
SUPPORTED TO SEQ ID NO: 69:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 146, Application US/08372105
Patent No. S627153
GENERAL INFORMATION:
APPLICANT: Little, Roger G.
APPLICANT: Lim, Edward
APPLICANT: Lambert, Lewis H.
APPLICANT: Scannon, Patrick J.
                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc feature;
COTHER INFORMATION: "rBPI"
US-08-372-105-69
                                                                                                                                                                                                                                                                                                                  LENGTH: 487 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
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US-08-372-105-146
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                                                                                                                                      KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFOLPSSOISMVPNVGLKFSISNANIKISG
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                                                                                                               1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL
                                                                       Gaps
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                         Length 487;
                                                                     0; Indels
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APPLICANT: Little. Roger G.
APPLICANT: Limm Edward
APPLICANT: Lambert, Lewis H.
APPLICANT: Scannon, Patrick J.
IITLE OF INVENTION: Anti-Fungal Materials and Methods
NUMBER OF SEQUENCES: 227
CORRESPONDENCE ADDESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Bo:
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CITY: Chicago
STATE: Chicago
STATE: Illinois
COUNTRY: United States of America
ZIP: 6606-6402
ZOMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: BE PC compatible
COMPUTER: BE PC compatible
COMPUTER: BEADILI RELEASE #1.0, Version #1.25
SOFTWARE: Patentin Ralease #1.0, Version #1.25
APPLICATION NUMBER: US/08/372,105
                       100.0%; Score 2507; DB 1;
100.0%; Pred. No. 6.6e-209;
ive 0; Mismatches 0;
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PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE: 11-JUL-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/209,762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 69, Application US/08372105; Patent No. 5627153; GENERAL INFORMATION:
                                              Best Local Similarity 100.
Matches 487; Conservative
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APPLICANT: Little, Roger G. II
APPLICANT: Gazzano-Santoro, Helene
APPLICANT: Parent, James Brian
TITLE OF INVENTION: Therapeutic uses of
TITLE OF INVENTION: Bactericidal/Permeability-Increasing Protein Products
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: Lilinois
COUNTRY: USA
                     421 HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF 480
421 HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF 480
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100.0%; Score 2507; DB 1;
Best Local Similarity 100.0%; Pred. No. 6.6e-209;
Matches 487; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/415,158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION: 514
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/093,202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 08/030,644
FILING DATE: 12-WAR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                         US-08-415-158-2
; Sequence 2, Application US/08415158
; Patent No. 5639727
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
REFRENCE/DOCKET NUMBER: 3158
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLECULE TYPE: protein US-08-415-158-2
                                                                                                                 481 GADVVYK 487
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY:
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241 VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            YOEAGVLKMTLRDDMI PKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360
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                NUMBER OF SEQUENCES: 227
CORRESPONDENCE ADDRESS:
ADDRESSE: 4300 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STREET: 111nois
COUNTRY: United States of America
CITY: Chicago
STATE: 111nois
COUNTRY: United States of America
COUNTRY: United States of America
ZIP: 6606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: PLOPPY disk
COMPUTER: 1BM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/372,105
FILING DATE: 11-JUL-1994.
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-1994
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-1994
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-1994
APPLICATION NUMBER: 33,547
REGISTRATION NUMBER: 33,547
REGISTRATION NUMBER: 33,547
REGISTRATION NUMBER: 33,547
REGISTRATION NUMBER: 33,547
REEEFPAN: 312/474-6300
TELEFPAN: 312/474-6300
TELEFPAN: 312/474-6300
TELEFPAN: 312/474-6300
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Best Local Similarity 100.0%; Pred. No. 6.6e-209;
Matches 487; Conservative 0; Mismatches 0; Indels 0
TITLE OF INVENTION: Anti-Fungal Materials and Methods
NUMBER OF SEQUENCES: 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 146:
SEQUENCE CHARACTERISTICS:
LENCTH: 487 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MOLECULE TYPE: protein
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MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL
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                              181 KVGWLIQLFHKKIESALRNKOMSQVCEKVTNSVSSKLQPYFQTLPVWTKIDSVAGINYGL 240
                                                                                          VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 300
                                                                                                                                                       YQEAGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360
                                                                                                                                                                                                                    PIGLIFYPAVDVQAFAVLDPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK 420
                                                                                                                                                                                                                                                                                  HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF 480
                                                                           300
                                                                                                                                       YQEAGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360
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                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Application US/08064693
; Patent No. 5643570
; GENERAL INFORMATION:
; APPLICANT: Theofan, Lynn S
APPLICANT: Horwitz, Arnold
; TITLE OF INVENTION: BPI-Immunoglobulin Fusion Proteins
; WUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: Floppy disk
MEDIUM TYPE: A PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PAETENTIN Release #1.0, Version #1.25
SUSTWARE: PAETENTIN Release #1.0, Version #1.25
CURRENT APPLICATION DATE: 19930519
FLING DATE: 19930519
CLASSIFICATION: 424
ATTORNEY/AGENT INFORMATION:
NAME: Meyers Thomas C.
REGISTRATION NUMBER: 30659
REFERENCE/DOCKET NUMBER: 30659
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION OF SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH 487 amino acida
TYPE: AMINO ACID
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6300 Sears Tower, 233 South Wacker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE: Marshall, O'Toole, Ge ADDRESSEE: Borun STREET: 6300 Sears Tower, 233 SC STATE: Illinois COUNTRY: USA
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Best Local Similarity 100.
Matches 487; Conservative
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GADVVYK 487
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US-08-064-693-2
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180
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                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                               61 KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG 120
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                9
1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL
                                                          KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG
                                                                                                                                          KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS
                                                                                                                                                                                                                       KVGWLIQLFHKKIESALRNKMNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL
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GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd. Copyright

OM protein - protein search, using sw model

October 21, 2005, 11:22:38 ; Search time 64.4411 Seconds (without alignments) 1104.324 Million cell updates/sec Run on:

US-10-629-516-2_COPY_10_193 943 1 CNAPRWYSLMYLVAIGTAVT...............HVHISKSKVGWUIQLFHKKI 184 Title: Perfect score: Sequence:

Scoring table:

BLOSUM62 Gapop 10.0 , Gapext 0.5

2105692 segs, 386760381 residues Searched:

2105692 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

A_Geneseq_16Dec04:* 1: genesecp19A0a.* Database :

geneseqp1980s:* geneseqp2000s:* geneseqp2001s:* geneseqp2001s:* geneseqp2003as:* geneseqp2003as:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

geneseqp2004s:*

SUMMARIES

| | Description | Aar88746 rBPI(1-19 | Aaw16801 Recombina | Aaw16800 Recombina | Aaw47091 Human rec. | Aar33777 BPIP from | Aaw16803 Recombina | Aaw16802 Recombina | Aaw62410 Bacterici | Aar21840 Human 57k | Aar71291 Human bac | Aab66058 Human Bac | Abo32712 Secreted | Abu04504 Human exp | Abu04575 Human exp | Adq10386 Human pol | Human | Aau06198 Human bac | | Aar44420 pING4512 | Aar43886 Human bac | Aar62370 Recombina | Aar57901 Bacterici | Aar62344 Recombina | Aar68923 Bacterici | Aar71290 Human bac |
|-----------|------------------|--------------------|--------------------|--------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|----------|--------------------|----------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| SUMMAKIES | ID | AAR88746 | AAW16801 | AAW16800 | AAW47091 | AAR33777 | AAW16803 | AAW16802 | AAW62410 | AAR21840 | AAR71291 | AAB66058 | AB032712 | ABU04504 | ABU04575 | ADQ10386 | ADQ98258 | AAU06198 | AAR24777 | AAR44420 | AAR43886 | AAR62370 | AAR57901 | AAR62344 | AAR68923 | AAR71290 |
| | Length DB | 220 2 | 221 2 | 230 2 | 230 2 | 243 2 | 243 2 | 267 2 | 300 2 | 368 2 | 368 2 | 483 4 | 483 6 | 483 6 | 483 6 | 483 8 | 483 8 | 487 1 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 |
| de | Query Match I | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| | Score | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 |
| | Result No. | | 2 | m | 4 | Ŋ | 9 | 7 | 80 | 6 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |

| | | 47 Recombina | 45 Bacterici | | | 55 rBPI for | 43 Recombina | 52 Recombina | 96 Recombina | 16 Recombina | 97 Recombina | 98 Recombina | 68 Human bac | 87 Bacterici | 50 Human bac | 02 Human bac | 86 Human bac | 190 Human bac | 41 Human rec | |
|----------|----------|--------------|--------------|----------|----------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|--|
| Aar79185 | Aar79021 | Aar8124 | Aar81245 | Aar80995 | Aar67998 | Aar86455 | Aar76243 | Aaw05852 | Aaw16796 | Aaw16816 | Aaw16797 | Aaw16798 | Aar97568 | Aaw1798' | Aaw44650 | Aaw01702 | Aaw17986 | Aaw47090 | Aaw40141 | |
| AAR79185 | AAR79021 | AAR81247 | AAR81245 | AAR80995 | AAR67998 | AAR86455 | AAR76243 | AAW05852 | AAW16796 | AAW16816 | AAW16797 | AAW16798 | AAR97568 | AAW17987 | AAW44650 | AAW01702 | AAW17986 | AAW47090 | AAW40141 | |
| 8 | N | | | | | ~ | | | | | | | | | | | | | | |
| 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | 487 | |
| 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | . 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | 943 | |
| 26 | 27 | 28 | 53 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | |

ALIGNMENTS

bactericidal-permeability increasing protein; BPI; truncated; dimer; endotoxic shock; heparin neutralisation; angiogenesis; inhibitor; ss the native signal 1. .27
| Jabel= signal | Amino acids of the native signal | /note= "the first 4 amino acids of the native signal peptide have been deleted" | Pabel 2.20 | /label = rsp!(1-193) | /note= "the first 193 residues of human mature BPI" rBPI(1-193) with 27 amino acid signal peptide. Location/Qualifiers AAR88746 standard; protein; 220 AA 94US-00212132. 94US-00212132. 10-APR-1996 (first entry) (XOMA) XOMA CORP. 11-MAR-1994; 11-MAR-1994; 05-SEP-1995. US5447913-A. Synthetic. AAR88746; Key Peptide Protein AAR88746

Improved use of a bactericidal-permeability increasing protein - for neutralisation of heparin and treatment of endo-toxaemia, by admin. as covalently linked dimer of N-terminal fragment. WPI; 1995-319904/41.

Little RG;

Ammons WS,

Example 1; Page ?; 36pp; English.

ö Compositions of N-terminal fragments (i.e. amino acids 1-193 to 1-199) human bactericidal-permeability increasing (BPI) protein are used to neutralise heparin and to treat endotoxaemia. Efficacy of such compens is improved when they comprise at least 50% of the truncated rBPI in

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dimeric form. The present sequence is that of rBPI(1-193) in which the first 4 amino acids of the BPI signal peptide are removed, the codon specifying the fifth amino acid of the signal sequence (Net at position - 27) is placed in the context of a consensus Kozak translation initiation sequence. This truncated rBPI is the preferred monomer for dimerisation in the presence of copper 2+ ions. N.B. The patent specification includes the known full-langth BPI sequence but does not contain sequences for any of the truncated versions of the protein. The present sequence has been obtained by modifying the wild-type sequence according to the description given by the inventors
                                                                                                                                                                                                                                                                                                                                                                             DSFKIKHLIGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                            185
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                                                                                                                                                                                                                                                                                                           CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                               KASGNFDLSIEGASISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF
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                                                                                                                                                                                                                      100.0%; Score 943; DB 2; Length 220; 100.0%; Pred. No. 1.4e-92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Recombinant endotoxin neutralising polypeptide Lot #159699.
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1. .31
/label= sig_peptide
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Matches 184; Conservative
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                                                                                                                                                                                      Sequence 220 AA;
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The present sequence is the recombinant endotoxin neutralising
polypeptide (RENP) B(1-190) (Lot #15969), which comprises residues 1-190
cf human bactericidal/permeability increasing protein (NBPI). The RENP,
which selectively and specifically binds lipopolysaccharide (LPS) and has
endotoxin neutralising activity, can be used to detect a site of Gram
endotoxin neutralising activity, and prevent or treat endotoxin related
clisorders, preferably where LPS mediated stimulation of neutrophils and
monouclear cells is inhibited, e.g. shock, disseminated intravascular
coagulation, anaemia, thrombocytopaenia, adult respiratory distress
syndrome, renal failure, liver disease and conditions associated with
Gram negative bacterial infection. The RENP has an enhanced serum half
life relative to naturally occurring BPI, and binds LPS without
criggering a significant, undesirable immune response. N.B. Sequence not
given in figure 3
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        70 DSFXIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 129
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 69
           Lipo:polysaccharide binding and endotoxin neutralising polypeptide -
useful in diagnosis, prevention and treatment of Gram-negative bacterial
infection and associated disorders and conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 221;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indele
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Score 943; DB 2;
; Pred. No. 1.4e-92;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .31
/label= sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAW16800 standard; protein; 230 AA.
                                                                                             Example 1; Page; 147pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 100.
Matches 184; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HKKI 184
                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 221 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9634873-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAW16800;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                   The present sequence is the recombinant endotoxin neutralising polypeptide (RENP) B(1-199) (NCY108), which comprises residues 1-199 of human bactericidal/permeability increasing protein (hBPI). The RENP, which selectively and specifically binds lipopolysaccharide (LPS) and has endotoxin neutralising activity, can be used to detect a site of Gram negative bacterial infection, and prevent or treat endotoxin related clisorders, preferably where LPS mediated stimulation of neutrophils and monounclear cells is inhibited, e.g. shock, disseminated intravascular coagulation, anaemia, thrombocytopaenia, adult respiratory distress coagulation, anaemia, thrombocytopaenia, adult respiratory distress cyndrome, renal failure, liver disease and conditions associated with Gram negative bacterial infection. The RENP has an enhanced serum half it relative to naturally occurring BPI, and binds LPS without given in specification, but produced using the wild type hBPI sequence not given in figure 3
                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69
                                                                                                                                   Lipo:polysaccharide binding and endotoxin neutralising polypeptide - useful in diagnosis, prevention and treatment of Gram-negative bacterial infection and associated disorders and conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bactericidal/permeability increasing protein; BPI; clot formation; TA; clot dissolution; thrombosis; thrombolytic agent; recombinant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CNAPRWYSLMYLVAIGTAVTAAVNPGYVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF
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                                                                                                                                                                                                                                                                                                                                                                                                                 Length 230;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 943; DB 2;
100.0%; Pred. No. 1.5e-92;
cive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human recombinant BPI (rBPI23) protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAW47091 standard; protein; 230 AA.
                                                                                                                                                                                   Example 1; Page; 147pp; English
                                              95US-00431517.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-MAY-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 100.
Matches 184; Conservative
                                                                   (INCY-) INCYTE PHARM INC
                                                                                          Marra MN;
                                                                                                               WPI; 1996-506090/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HKKI 184
                                                                                                                                                                                                                                                                                                                                                                                            Sequence 230 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
Synthetic.
                       01-MAY-1996;
                                              01-MAY-1995;
 07-NOV-1996
                                                                                          Scott RW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAW47091;
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                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
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This is a recombinant bactericidal/permeability-increasing (BPI) protein product ran be administered especially by contacting with blood to delay or prevent clot formation in the blood or contacting with blood to delay or prevent clot formation in the blood or to enhance clot dissolution in the blood. A BPI protein product can also be administered, optionally with a thrombolytic agent (TA), to treat a patient suffering from thrombotic disorders such as arterial thrombosis, etroke, intracardiac thrombosis, peripheral artery thrombosis associated with exposure of blood to a foreign or injured thrombosis associated with exposure of blood to a foreign or injured tissue surface, hypercoagulability, non-endotoxin-associated intravascular coagulopathy: The BPI protein products can be used in a method for enhancing reperfusion or reducing reocclusion in a subject treated with a comprising co-administration of the BPI protein product and the TA and reperfusion or to reducing reocclusion in a subject treated with a reperfusion or to reduce reocclusion in a subject to establish reperfusion of a BPI protein product and TA, the dosage of the TA being less than that required for a desired pharmaceutical effect when the TA is administered as a monotherapy. The BPI protein product shave comprising candinistered as a monotherapy. The BPI protein product and thrombolytic activity and can be used for the TA entited and thrombolytic activity and can be used for the product can the capacity of products can be used for reduce the dosage of antichrombotic agent canticoagulant and thrombolytic activity and can be used for the capacity or eliminating potential side effects. Note: This sequence is not provided in the specification. It has been created connectivity and capacity or eliminating potential side effects. Note: The property and provided in the specification. It has been created benefit energing and the specification in sequence given in Pages 46-48 of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CNAPRWYSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Use of bactericidal/permeability-increasing protein products - for slowing clot formation and enhancing clot dissolution in blood, particularly for treating thrombotic disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
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                                                                                                                                                         /note= "mature recombinant rBP123 protein"
                                                                                                                                                                                                                                                                          /note= "wild-type Lys is replaced by Glu"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 943; DB 2;
100.0%; Pred. No. 1.5e-92;
ive 0; Mismatches 0;
                                             1. .31
/note= "signal sequence"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page; 56pp; English
                                                                                                                                                                                                                                    /label= K216E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97WO-US008017.
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                                                                                                                    32. .230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               White ML, Ammons WS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1998-008579/01.
                                                                                                                                                                                               Misc-difference 216
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                             WO9742967-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                        20-NOV-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Н
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    Key
Peptide
                                                                                                                        Protein
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DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120

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inhibitor; endotoxin-felated shock; dissemia; thrombocytopenia; ARDS; renal failure; endotoxemia; adult respiratory distress syndrome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The human bactericidal/permeability increasing protein may be used in a compsn. solubilised in a lipid carrier. The BPIP binds lipopolysaccharides and inhibite the immunostimulatory and toxic activities of LDS in vitro and in vivo. The lipid copmpsn. stably maintains the BPIP in a sol. active form. The compsn. can be used for chetecting or quantifying LDS in a sample, coating a surgical tool, coating an implantable invasive device, decontaminating a fluid conty. LPC and treating endotoxin related -shock, -disseminated intravascular coagulation, -anaemia, -thrombocytopenia, -adult respiratory stress syndrome or -renal failure, or for preventing endotoxaemia. See also AAR33776, AAR33729-31. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                       Sacterial/permeability increasing protein; lipopolysaccharide; LPS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Compsns. contg. a bactericidal and permeability increasing protein solubilised in a lipid carrier to maintain stably an active form.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 943; DB 2; Length 243; 100.0%; Pred. No. 1.6e-92; Live 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                                                   32. .243
/note= "mature protein"
                                                                                                                                                                                                                                                                                                                                                                                           1. .32
/note= "signal peptide"
                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                              AAR33777 standard; protein; 243 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure, Fig 7; 53pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Snable JL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92WO-US008234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91US-00766566
                                                                                                                                                                                                   (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (INCY-) INCYTE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scott RW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1993-117241/14.
                                          HKKI 184
                                                                     HKKI 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seguence 243 AA;
                                                                                                                                                                                                                                             BPIP from p212.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-SEP-1992;
                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9305797-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-SEP-1991;
                                                                                                                                                                                                   25-MAR-2003
22-JUL-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-APR-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Marra MN,
                                                                                                                                                                        AAR33777;
                130
                                                                     190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                            181
                                                                                                                                                                                                                                                                                                                                                                                         Peptide
                                                                                                                                                                                                                                                                                                                                                                                                                      Region
                                                                                                                  RESULT
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The present sequence is the recombinant endotoxin neutralising polypeptide (RENP) B(1-212) (Lot #159693), which comprises residues 1-212 of human bactericidal/permeability increasing protein (HBPI). The RENP, which selectively and specifically binds lipopolysaccharide (LPS) and has endotoxin neutralising activity, can be used to detect a site of Gram negative bacterial infection, and prevent or treat endotoxin related disorders, preferably where LPS mediated stimulation of neutrophils and mononuclear cells is inhibited e.g. shock, disseminated intravagular coagulation, anaemia, thrombocytopaenia, adult respiratory distress syndrome, renal failure, liver disease and conditions associated with Gram negative bacterial infection. The RENP has an enhanced serum half life relative to naturally occurring BPI, and binds LPS without triggering a significant, undesirable immune response. N.B. Sequence not given in specification, but produced using the wild type hBPI sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lipo:polysaccharide binding and endotoxin neutralising polypeptide - useful in diagnosis, prevention and treatment of Gram-negative bacterial infection and associated disorders and conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                     Recombinant; endotoxin; neutralisation; RENP; Lot #159693; lipopolysacharide; LBS; bacteritcidal; permeablilty; increase; BPI; detection; Gram-negative; bacterium; infection; prevention; treatment; disorder; mediation; etimulation; neutrophil; mononuclear cell;
70 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL
                                                                       130 KASGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF
                                                       121 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inhibition; shock; anemia; anaemia;
disseminated intravascular coagulation; thrombocytopenia;
thrombocytopaenia; adult respiratory distress syndrome; ARDS;
renal failure; liver disesse; half life; human.
                                                                                                                                                                                                                                                                                                                                                                                   Recombinant endotoxin neutralising polypeptide Lot #159693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .31
/label= sig_peptide
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                                                                                                                                                                                                                                                                      AAW16803 standard; protein; 243 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page; 147pp; English.
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                                                                                                                                                                                                                                                                                                                                             (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scott RW, Marra MN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1996-506090/50.
                                                                                                                                 HKKI 184
                                                                                                                                                                      HKKI 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                 181
                                                                                                                                                                                                                                                                                                          AAW16803;
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CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 1 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS

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Gaps

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100.0%; Score 943; DB 2; 100.0%; Pred. No. 1.8e-92; ive 0; Mismatches 0;

Length 267; Indels 9 69 189

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of human bactericidal/permeability increasing protein (hBPI). The RENP, which selectively and specifically binds lipopolysaccharide (LPS) and has endotoxin neutralising activity, can be used to detect a site of Gram negative bacterial infection, and prevent or treat endotoxin related disorders, preferably where LPS mediated stimulation of neutrophils and mononuclear cells is inhibited, e.g. shock, disseminated intravascular coagulation, anaemia, thrombocytopaemia, adult respiratory distress syndrome, renal failure, liver disease and conditions associated with Gram negative bacterial infection. The RENP has an enhanced serum half life relative to naturally occurring BPI, and binds LPS without triggering a significant, undesirable immune response. N.B. Sequence not given in specification, but produced using the wild type hBPI sequence given in figure 3
                                                                                                                                                                                                                                                                                                                                     DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
                                                                                                                                                                                                                                                                                                                                                     70 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 129
                                                                                                                                                                                                                                                                                                                                                                                            121 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSHINSVHVHISKSKVGWLIQLF 180
                                                                                                                                                                                                                                                                                                10 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                         130 KANSGNPDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF
                                                                                                                                                                                                                                                                                1 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                          Best Local Similarity 100.
Matches 184; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               193
                                                                                                                                                                                                                                                                                                                                                                                                                                                    HKKI 184
                                                                                                                                                                                                 Sequence 267 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               190 HKKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-MAR-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 8
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                                                                                                                                                                                       DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lipo:polysaccharide binding and endotoxin neutralising polypeptide - useful in diagnosis, prevention and treatment of Gram-negative bacterial infection and associated disorders and conditions.
                                                                                                                                  10 CNAPRWYSLAVIJVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 69
                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Recombinant; endotoxin; neutralisation; RENP; Lot #159695;
lipopolysaccharide; LPS; bactericidal; permeablilty; increase; BDI;
detection; Gram-negative; bacterium; infection; prevention; treatment;
disorder; mediation; stimulation; neutrophil; mononuclear cell;
                                                                                                                                                                                                                                           CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                              XMSGNFDLSIEGMSISADLXLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLP
                                                                                         Gaps
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   inhibition; shock; anemia; anaemia;
disseminated intravascular coagulation; thrombocytopenia;
thrombocytopaenia; adult respiratory distress syndrome; ARDS;
renal failure; liver disease; half life; human.
                                                               Length 243;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Recombinant endotoxin neutralising polypeptide Lot #159695
                                                                                         Indels
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                                                             100.0%; Score 943; DB 2;
100.0%; Pred. No. 1.6e-92;
ive 0; Mismatches 0;
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/label= sig_peptide
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                                                                            al Similarity 100.
184; Conservative
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        given in figure 3
                                                                                                                                                                                                                                                                                      HKKI 184
                                                                                                                                                                                                                                                                                                                HKKI 193
                                     Sequence 243 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (INCY-) INCYTE
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Best Local 8
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Bactericidal and endotoxin-neutralising peptides - used in treating e.g.
Pseudomonas species infection and in protectively coating prosthetic
devices.
                                                                                                                                                                                                                         Bactericidal, Pseudomonas sp, endotoxin shock, bacterial infection, bactericidal permeability increasing factor; B/PI; neutralising; human neutrophil granule bactericidal protein.
                                                                                                                                                                        Bactericidal permeability increasing factor #1.
AAW62410 standard; protein; 300 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Fig 4; 46pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94US-00218026
                                                                                                                 (first entry)
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N-PSDB; AAV39860.
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Matches
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                                      Pseudomonas species; (b) with endotoxin neutralising activity; (c) with both endotoxin neutralising activity and bactericidal activity for betweenomes aeruginosa; (d) a hybrid peptide with endotoxin neutralising activity for activity and bactericidal activity, the peptide with endotoxin neutralising activity combined with at least 1 different amino acid sequence of a peptide that has bactericidal activity; and (e) a prosthetic device which has a sufficient amount of BP attached to the surface to inhibit bacterial growth. The peptides of the invention are used in treating bacterial infection such as Pseudomonas strains e.g. for P. aeruginosa at 10-7 to 10-9 M, and Escherichia coli. The peptides are also used to treat endotoxin shock. The present sequence represents bactericidal permeability increasing factor from an example of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KASGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSHINSVHVHISKSKVGWLIQLF 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human 57kd protein p337 which binds to the outer membrane of susceptible
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                            present invention describes bactericidal peptides (BP): (a) for
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                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 300;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Score 943; DB 2; 100.0%; Pred. No. 2.1e-92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
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/label= residues -31
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91US-00681551.
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Matches 184; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                Sequence 300 AA;
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Region
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WPI; 1992-096879/12

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                                                                                                           The BPI binds endotoxin in the presence of serum and plasma and, unlike other known endotoxin binding proteins such as LBP (lipopolysaccharide binding protein), BPI inhibits the immunostimulatory and toxic activities of endotoxin both in vitro and in vivo. Thus BPI can be used in the diagnosis and therapeutic and prophylactic treatment of endotoxin-related disorders including endotoxemia and endotoxic shock
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New recombinant BPI protein - specifically binds to and inhibits endotoxin lethality, for prevention, treatment and diagnosis of endotoxaemia and endotoxic shock.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human bactericidal-permeability increasing protein p337 variant.
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                                                                                                                                                                                                                                                                                    Length 368;
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                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                  100.0%; Score 943; DB 2;
100.0%; Pred. No. 2.8e-92;
tive 0; Mismatches 0;
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                                                                          Disclosure; Fig 13; 108pp; English.
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                                                                                                                                                                                                                                                 Sequence 368 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
                          permeability increasing protein (see AAR71290), which has antibacterial activity against Gram-negative bacteria, inhibits lipopolysacofaride (LPS) directly, and inhibits LPS- mediated tumor necrosis factor production from mononuclear cells. (Updated on 25-MAR-2003 to correct PN
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                                                                                                                                                                                                                                                                                                                                                                                                                         69
  protein is a 38 kDa non-glycosylated variant of human bactericidal-
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to TANGO or INTERCEPT proteins and coding sequences (see AAF45121-F45136 and AAF45138-F45139 and AAB66031-B66057, AAB66064-B66083 and AAB66085). The TANGO/INTERCEPT proteins and coding
                                                                                                                                                                                                                                                                                                                                                                                                       CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
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                                                                                                                                                                                                                                                     Score 943; DB 2;
Pred. No. 2.8e-92;
; Mismatches 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
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                                                                                                                                                                                                      Sequence 368 AA;
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Human; TANGO; INTERCEPT; secreted polypeptide; immune disorder; hormonal disorder; proliferative disorder; cancer; thyroid disorder; diabetes; multiple sclerosis; lupus; neurological disorder; anaemia; Alzheimer's disease; Parkinson's disease; cardiovascular disorder; myocardial infarction; congestive heart disease; blood platelet disorder; thrombocytopenia; blood vessel; atherosclerosis; vasculitis.
sequences are useful for the treatment of neurological disorders such as central nervous system (CNS) disorders, CNS-related disorders, focal brain disorders, global-diffuse cerebral disorders and other neurological and cerebrovascular disorders. The CNS disorders include Alzheimer's disease, senile dementia, Huntington's disease, amyotrophic lateral sclerosis, Parkinson's, Gilles de la Tourette's syndrome, autonomic function disorders such as hypertension and sleep disorders, neuropsychiatric disorders, psychoactive substance use disorders, anxiety, and bipolar affective disorder. The present sequence is a sequence used in a sequence homology alignment with the TANGO/INTERCEPT
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                                                                                                                                                                        sequences of the present invention
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     standard; protein; 483
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99US-00342364.
99US-00393996.
99US-00420707.
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24-MAY-2000; 2000US-00578063.
16-JUN-2000; 2000US-00596194.
23-JUN-2000; 2000US-00596194.
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2000US-00608452
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                                                                                                                                                                                                       Sequence 483 AA;
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07-JAN-2000;
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(BARN/) I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                         Query Match
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                                                                                                                                                                                                                                                                                The invention relates to secreted polypeptide-related proteins and nucleic acids (TANGO and INTERCEPT proteins and nucleic acids). The nucleic acids (TANGO and INTERCEPT proteins and nucleic acids). The cucleic acids, proteins and antibodies specific to the proteins are useful in screening assays, predictive medicine (e.g. diagnostic assays, prognostic and therapeutic methods. The sequences are used in diagnostic, and therapeutic methods. The sequences are used in diagnostic, prophylactic and therapeutic methods. The sequences are used in diagnostic, preventing or treating proliferative disorders (e.g. multiple soleroais or lupus), neurological disorders (e.g. Alzheimer's disease or Parkinson's disease), neurological disorders (e.g. Alzheimer's disease or Parkinson's disease), cardiovascular disorders (e.g. Alzheimer's disease or Parkinson's disease), cardiovascular disorders (e.g. thrombocytopenia or ansemia) and disorders platelet disorders (e.g. thrombocytopenia or ansemia) and disorders cids may also be used in chromosome mapping, tissue typing and forensic biology, and as surrogate markers. This sequence represents a secreted colypeptide-related protein of the invention. Note: The sequence data for this patent was obtained in electronic format directly from USPTO at equance can be considered.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 65
                                                                                                                                                                                            nucleic acid molecule encoding a secreted protein (e.g. TANGO 202, 50 210 or INTERCEPT 217), useful for diagnosing, preventing or tring disorders such as cancer, diabetes or atherosclerosis, and in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
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                                                                                                                               Kirst SJ, Myers PS, Leiby KR;
ton N, Mackay CR, Goodearl ADJ;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 483;
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4.1e-92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 943; D
100.0%; Pred. No. 4.1
:ive 0; Mismatches
                                                                                                                                Sharp JD, Kirst
SA, Wrighton N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human expressed protein tag (EPT) #1170.
                                                                                                                                                                                                                                                            Claim 9; Fig 28F-28G; 482pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    184; Conservative
                                                                                                                                               Mccarthy
                                                                                                        GOODEARL A D J
SHARP J D.
KIRST S J.
MYERS P S.
LEIBY K R.
HOLTZMAN D A.
MCCARTHY S A.
WRIGHTON N.
                                                                                                                                Barnes TM,
                                                                                                                                                                     WPI; 2003-456290/43.
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                                                                                                                                                                                                                                   forensic biology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 483 AA;
                                                                                                                                            Holtzman DA,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                  (HOLT/)
(MCCA/)
(WRIG/)
(MACK/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
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                                         LEIB/)
                (KIRS/)
                          (MYER/)
                                                                                                                                 Fraser
                                                                                                                                                                                                            TANGO
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the invention describes a purified polypeptide, which comprises a fragment of a kinase, phosphatase, protease, protease inhibitor, transporter, cytoskeletal protein, receptor or transcription factor. The polypeptide is useful an immunogenic composition for eliciting in a mammal an immunogenic response directed against any of the purified polypeptide. The purified polypeptide, or the antibody that binds to this polypeptide. The purified holypeptide, or the antibody that binds to this polypeptide. The purified nolypeptide is also useful for treating cancer. The polypeptide is also useful for identifying compounds that binds to a naturally processed class I or class II MHC-binding polypeptide. The polypeptides and purifieds are particularly useful for treating or preventing myeloms, colon cancer, gastric cancer, adenocarcinoms, sarcoma, melanoma, lymphoma or leukaemia. These are also useful for screening agents for treating the above mentioned diseases. This sequence represents an treating the above mentioned diseases. This sequence represents an profiling. Note: This sequence does not appear in the printed profiling, but was obtained in electronic format directly from WIPO at
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
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    expressed protein tag; EPT; kinase; phosphatase;
Translational profiling, expressed protein tag; EPT; kinase; phosphatase; protease; protease inhibitor; transporter; cytoskeletal protein; reseptor; transcription factor; cancer; WHC; major histocompatability complex; myeloma; colon cancer; gastric cancer; adenocarcinoma; sarcoma; melanoma; lymphoma; leukaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptides (e.g. kinases, phosphatases, proteases, transporters, cytoskeletal proteins, receptors or transcription factors), useful for treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or
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100.0%; Pred. No. 4.1e-92;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; SEQ ID NO 1170; 134pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-MAY-2001; 2001US-0292544P.
08-AUG-2001; 2001US-0310801P.
01-OCT-2001; 2001US-0326370P.
04-DEC-2001; 2001US-0358985P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-MAR-2002; 2002WO-US009671
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                                                                                                                                                                                                                                                                                                                                WO200278524-A2
                                                                                                                                                                                                                                                      Homo sapiens.
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Matches 184;
                                                                                                                                                                                                                                                                                                                                                                                                              10-OCT-2002
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HKKI 184

6 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS

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                                                                                                                                                                                                                                                 Translational profiling, expressed protein tag; EPT; kinase; phosphatase; protease; protease inhibitor; transporter; cytoskeletal protein; receptor; transcription factor; cancer; MHC; major histocompatability complex; myeloma; colon cancer; gastric cancer; adenocarcinoma; sarcoma; melanoma; lymphoma; leukaemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New polypeptides (e.g. kinases, phosphatases, proteases, transporters, cytoskeletal proteins, receptors or transcription factors), useful for treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or
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                                                                                                                                                                                                                Human expressed protein tag (EPT) #1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Urban RG;
                                                                                              ABU04575 standard; protein; 483 AA
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08-MUG-2001, 2001US-0310801P.
01-OCT-2001, 2001US-0326370P.
04-DEC-2001, 2001US-0358985P.
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                                                                                                                                                                            (first entry)
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186 HKKI 189
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                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
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                                                                                                                                     ABU04575;
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encode. The invention also relates to a host cell containing a polymucleotide of the invention, an antibody which selectively binds with a polymptide of the invention, a method of detecting the presence of a polymptide in a sample, a method of identifying a compound which binds with a polypeptide, and a method of modulating the activity of a
                                                          180
             66 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 125
                                                                         126 KMSGNPDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 185
                                                                                                                                                                                                                                                                                                                                                                 Human; cancer; obesity; gastritis; diarrhoea; haemorrhoid; asthma; anaemia; graft-versus-host reaction; allergic reaction; cystic fibrosis; hypogonadism; cardiovascular disorder; arthritis; osteoarthritis; arteriosclerosis; hypertension; bacterial infection; psoriasis; diabetes mellitus; hepatitis; Alzheimer's disease; Huntington's disease; Parkinson's disease; AlDS; tuberculosis; viral infection; malaria; goiter; infertility; endometriosis; muscular disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to human polynucleotides and the polypeptides they
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                                                            KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF
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2000US-00559497.
2000US-00578063.
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99US-00393996
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                                                                                                                                                                                                                                                                                                                                      Human polypeptide #206.
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27-APR-2000;
24-MAY-2000;
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1 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 60

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polypeptide. The polynucleotides, polypeptides and compositions are useful for diagnosing, preventing and/or treating cancer, obesity, gastritis, diarrhoea, haemorrhoide, asthma, anaemia, graft-versus-host reactions, allergic reactions, cystic fibrosis, hypogonadism, cardiovascular disorders, arthritis, osteoarthritis, arteriosclerosis, hypetrension, bacterial infections, psoriasis, diabetes mellitus, hepatitis, Alzheimer's disease, Huntington's disease, Parkinson's disease, AlDS, tuberculosis, viral infections, malaria, goiter, infertility, endometriosis, wounds and muscular disorders. This sequence for this patent did not form part of the printed specification but was sequence in electronic format from USPTO at
           88888888888888888888
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Sequence 483 AA;

KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180 65 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 1 CNAPRWYSLMYLVAIGTAYTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS Gaps ö Query Match 100.0%; Score 943; DB 8; Length 483; Best Local Similarity 100.0%; Pred. No. 4.1e-92; Matches 184; Conservative 0; Mismatches 0; Indels C 121 g ò Ωp g ò ò

HKKI 189 HKKI 184 181 186 ઠે 용

Search completed: October 21, 2005, 11:26:47 Job time : 65.4411 secs

Fri

GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.

OM`protein - protein search, using sw model

October 21, 2005, 11:22:43 ; Search time 37.7407 Seconds (without alignments) 1241.566 Million cell updates/sec Run on:

Perfect score:

US-10-629-516-2 2507 1 MRENMARGPCNAPRWVSLMV.......NVVLQPHQNFLLFGADVVYK 487 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 seqs, 96216763 residues Searched: Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

PIR 79:* Database :

pirl:* pir2:* pir3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARTES

| | | app | | | SUMMARIES | |
|---------------|-----------|----------------|--------|-----|-----------|--------------------|
| Result No. | Score | Query Match | Length | DB | ID | Description |
| - | 2607 | | 487 | | NACOCO | bactericidal/perme |
| 4 (| 7 7 7 7 7 | 4 | 404 | ۰ د | 20002 | bactericidal perme |
| 4 m | 1288 | | 250 | 1 4 | S43383 | _ |
| 4 | 1087 | 43.4 | 481 | ~ | A54136 | lipopolysaccharide |
| ហ | 1052 | | 477 | ~ | A35843 | lipopolysaccharide |
| 9 | 1039 | | 481 | ~ | 156246 | lipopolysaccharide |
| 7 | 985.5 | | 482 | ~ | B35843 | lipopolysaccharide |
| 8 | 465 | | 493 | ~ | A53533 | phospholipid trans |
| 6 | 463.5 | | 493 | ~ | I49370 | plasma phospholipi |
| 10 | | 13. | 488 | ~ | C86183 | hypothetical prote |
| 11 | | 11. | 493 | 8 | A26941 | Φ |
| 12 | | 11. | 493 | ~ | A53176 | cholesteryl ester |
| 13 | | 10. | 497 | ~ | 146692 | cholesteryl ester |
| 14 | | ٦ | 470 | ~ | S17447 | probable ligand-bi |
| 15 | | | 473 | ~ | S17448 | probable ligand-bi |
| 16 | | | 909 | ~ | T29190 | hypothetical prote |
| 17 | | ω, | 487 | 7 | T18952 | |
| 18 | 189 | 7.5 | 464 | ~ | T16889 | _ |
| 13 | 186.5 | 7.4 | 486 | | T20482 | _ |
| 20 | 175 | 7.0 | ц | | T15438 | |
| 21 | 174 | 6.9 | | ~ | T22700 | hypothetical prote |
| 22 | 154 | 6.1 | 824 | | E87856 | н |
| 23 | 154 | 6.1 | 846 | ~ | T20710 | hypothetical prote |
| 24 | 138 | 5.5 | 284 | | T29001 | hypothetical prote |
| 25 | 122.5 | 4.9 | 412 | | T30079 | |
| 26 | 122 | 4.9 | 1134 | | T04587 | hypothetical prote |
| 27 | 110 | 4.4 | 1234 | N | B36186 | • |
| 28 | 109 | 4.3 | 779 | ~ | JH0102 | apolipoprotein B - |
| 59 | 108 | 4.3 | 177 | 8 | T29000 | hypothetical prote |

| hypothetical prote | probable receptor- | cholesteryl ester | receptor protein k | pnd emergence prot | genome polyprotein | glycyl-tRNA synthe | probable disease r | hypothetical prote | probable peptide s | translation initia | apolipoprotein B-1 | D-alanine activati | carbamoyl transfer | conserved hypothet | hypothetical prote |
|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| A97415 | H84632 | A38700 | T50851 | A49960 | GNVSTV | C83821 | H96510 | B84683 | T50176 | H97801 | JH0101 | E86782 | G75093 | H81654 | T20721 |
| 0 | ~ | ~ | ~ | ~ | н | 7 | 7 | 7 | ~ | ~ | 7 | ~ | ~ | 7 | 7 |
| 733 | 980 | 289 | 981 | 1128 | 3005 | 693 | 994 | 2218 | 4924 | 831 | 784 | 499 | 534 | 926 | 4307 |
| 4.2 | 4.2 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| 105 | 104.5 | 104 | 104 | 104 | 104 | 103 | 103 | 102.5 | 101.5 | 101 | 100.5 | 100 | 100 | 100 | 100 |
| 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |

ALIGNMENTS

N;Alternate names: 55K bactericidal protein
C;Species: Homo sapiens (man)
C;Species: Homo sapiens
B;Gray, P.W.; Flaggs, G.; Leong, S.R.; Gumina, R.J.; Wēlisē; J.; Ooi, C.E.; Elsbach, P. M; Gray, P.W.; Flaggs, G.; Leong, S.R.; Gumina, R.J.; Welisē; J.; Ooi, C.E.; Elsbach, P. M;Title: Cloning of the cDNA of a human neutrophil bactericidal protein. Structural and A;Reference number: A33850; MUID:89255455; PMID:2722846 bactericidal/permeability-increasing protein precursor - human A; Accession: A33850 A30909

A;Nolecule type: mRNA
A;Residues: 1-487 <GRA>
A;Residues: 1-487 <GRA>
A;Cross-references: UnFROT:Q9UCT4; GB:J04739; NID:g179528; PIDN:AAA51841.1; PID:g179529
A;Cross-references: UnFROT:Q9UCT4; GB:J04739; NID:g179528; PIDN:AAA51841.1; PID:g179529
J: Biol. Chen. 269; J7411-17416, 1994
A;Title: Bactericidal/permeability-increasing protein and lipopolysaccharide (LPS)-bindi
A;Reference number: A54136; MUID:94292492; PMID:7517398

A)Accession: B54136 A;Status: nucleic acid sequence not shown; not compared with conceptual translation A;Molecule type: mRNA

A.Residues: 1-374, 'L', 376-487 <WIL>
A.Residues: 1-374, 'L', 376-487 <WIL>
A.Experimental source: HL-60 cells
A.Note: sequence extracted from NCBI backbone (NCBIP:149855)
A.Note: sequence extracted from NCBI backbone, B.; Mannion, B.
J. Biol. Chem. 262, 14894, 1987
A.Fitle: A. 25-kDa amino-terminal fragment carries all the antibacterial activities of th A.Reference number: A29464; MUID:88033057; PMID:3667613

A,Accession: A29464
A,Molecule type: protein
A,Residues: 32-51 «COD:
A,Exerimental source: neutrophils

R;Wasiluk, K.R.; Skubitz, K.M.; Gray, B.H. Infect. Immun. 59, 4193-4200, 1991 A;Title: Comparison of granule proteins from human polymorphonuclear leukocytes which ar A;Reference number: A43600; MUID:92040097; PMID:1937776

A;Accession: A43600
A;Molecule type: protein
A;Residues: 32-52, R' < 4MAS>
B;Little, R.G.; Kelner, D.N.; Lim, E.; Burke, D.J.; Conlon, P.J.
J. Biol. Chem. 269, 1865-1872, 1994
A;Title: Functional domains of recombinant bactericidal/permeability increasing protein
A;Reference number: A49716; MUID:94124531; PMID:8294435

A;Accession: A49716
A;Molecule type: protein
A;Rolecule type: protein
A;Rolecule type: protein
A;Rolecule type: Drotein
C;Comment: The bactericidal/permeablity-increasing protein (BPI) is a 60 kD membrane-as (C;Comment: The bactericidal/permeablity-increasing protein (BPI) is a 60 kD membrane-as which is specific for gram-negative bacteria. BPI has a high affinity for lipopolysaccha between BPI and an LPS-binding protein from liver and cholesteryl ester transfer proteir

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Dactericidal/permeability-increasing protein - synthetic C;Species: synthetic C;Species: synthetic C;Species: synthetic C;Species: synthetic C;Dpecies: synthetic C;Dbate: 20-Oct-1994 #sequence_revision 15-Feb-1996 #text_change 15-Feb-1996 C;Accession: S43333 CConor, C.D. R;Qi, S.Y.; Li, Y.; O'Conor, C.D. R;Qi, S.Y.; Li, Y.; O'Conor, C.D. A;Title: The region around residue 115 of human bactericidal/permeability-increasing of a gene coding for the active domain and characterization of recombinant proteins. A;Recession: S43383 A;Accession: S43383 A;Accession: S43383 A;Accession: S4308-C;Accession: Codio C;Accession: Codio C;Accession: Codio C;Accession: C;Accessi
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                                                                                     60 IPNFSGNFKIKYLGKGQYSFFSMVIQGFNLPNSQIRPLPDKGLDLSIRDASIKIRGKWKA
                                                                                                                                                                          QKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGW
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    A;Cross-references: GDB:131572; OMIM:109195
A;Map position: 20q1.23-20q12
C;Superfamily: lipopolysaccharide-binding protein
C;Superfamily: lipopolysaccharide-binding protein
C;Keywords: antibacterial; cytocoxin; glycoprotein; heparin binding; neutrophil
F;1-31/Domain: signal sequence #status predicted <SIG>
F;1-51/Pomain: bactericidal permeability increasing protein #status predicted
F;32-461/Region: bactericidal #status predicted
F;32-51/Region: bactericidal #status predicted
F;380/Binding site: carbohydrate (Asn) (covalent) #status predicted
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                                                                                                                                                                                           Query Match
100.0%; Score 2507; DB 2; Length 487;
Best Local Similarity 100.0%; Pred. No. 1.4e-186;
Matches 487; Conservative 0; Mismatches 0; Indels 0.
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A; Molecule type: mRNA
A; Residues: 1-477 <SCH>
A; Cross-references: UNIPROT: P18428; GB:M35533; NID:g186965; PIDN:AAA59493.1; PID:g186966
C; Genetics:
A; Gross-references: GDB:131571; OMIM:151990
A; Cross-references: GDB:131571; OMIM:151990
C; Superfamily: lipopolysaccharide-binding protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             lippolysaccharide binding protein - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change 09-Jul-2004
C;Accession: 156246
R;Su, G.L.; Freeswick, P.D.; Geller, D.A.; Wang, Q.; Shapiro, R.A.; Wan, Y.H.; Billiar,
J. Immunol: 153, 743-752, 1994
A;Title: Molecular cloning, characterization, and tissue distribution of rat lipopolysac
A;Reference number: 156246; MUID:94292804; PMID:8021509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cross-references: UNIPROT:Q63313; GB:L32132; NID:g510714; PIDN:AAA21835.1; PID:g510715
Superfamily: lipopolysaccharide-binding protein
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                                                                                                                                                                                                                                                                                                                                13 PRWVSLMVLVAIGTAVTAAVNPGVVVRISOKGLDYASQQGTAALQKELKRIKIPDYSDSF
                                                                                                                                                                                                                                                                                                 18 LMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHL
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41.4%; Score 1039; DB 2; Length 4
Best Local Similarity 41.6%; Pred. No. 1.1e-72;
Matches 197; Conservative 109; Mismatches 166; Indels
                                                                                                                                                                                                     Query Match
42.0%; Score 1052; DB 2; Length 4
Best Local Similarity 44.1%; Pred. No. 1.1e-73;
Matches 207; Conservative 94; Mismatches 162; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Status: preliminary; translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Molecule type: mRNA
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Ilpopolysaccharide-binding protein - human
N;Alternace names: LBP; LRS-binding protein
C;Species: Homo sapiens (man)
C;Decies: 11-Oct-1994 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Accession: A$4136
C;Accession: A$4136
R;Wilde, C.G.; Sailhamer, J.J.; McGrogan, M.; Ashton, N.; Snable, J.L.; Lane, J.C.; Leon J. Biol. Chem. 269, 17411-17416, 1994
A;Title: Bacterididal/permeability-increasing protein and lipopolysaccharide (LPS)-bindi
A;Reference number: A$4136; MUID:94292492; PMID:7517398
A;Accession: A$4136
A;Residues: Preliminary; not compared with conceptual translation
A;Molecule type: nucleic acid
A;Residues: 1-481 <a href="https://wit.backbone">with conceptual translation</a>
A;Rolecule type: nucleic acid
A;Residues: 1-481 <a href="https://wit.backbone">with conceptual translation</a>
A;Roserence surver: liver
A;Note: sequence extracted from NCBI backbone (NCBIP:149401)
C;Superfamily: lipopolysaccharide-binding protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKKIESAL 197
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    258 EFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLVYQEAGVLKMTLRDDMIP 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           318 KESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQPTGLTFYPAVDVQAFAV 377
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18 LMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 43.4%; Score 1087; DB 2; Length 4 Best Local Similarity 44.8%; Pred. No. 2.1e-76; Matches 210; Conservative 95; Mismatches 162; Indels
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PPVMEFPAA 250
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C,Accession: A53533
R;Day, J.R.; Albers, J.J.; Lofton-Day, C.E.; Gilbert, T.L.; Ching, A.F.T.; Grant, F.J.; C, Biol. Chem. 269, 9388-9391, 1994
A;Title: Complete CDNA encoding human phospholipid transfer protein from human endothelist A;Reference number: A53533; MUID:94179366; PMID:8132678
A;Accession: A53533
A;Accession: A53533
A;Residues: 1-493 and A A;Accession: A53533
A;Residues: 1-493 and A A;Accession: A53533
A;Residues: 1-493 and A A;Accession: CDB:PLTP
A;Cross-references: GDB:340911; OMIM:172425
A;Map position: 20pter-20qter
C;Superfamily: lipopolysaccharide-binding protein
C;Superfamily: lipopolysaccharide-binding protein
C;Keywards: glycoprotein; phosphoprotein
F;1-17/Domain: signal sequence #status predicted <SIG>F;18-493/Product: phospholipid transfer protein #status experimental <MAT>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VOLSSMIMDARLSAKWALRGKALRIQLDLRRFRIYSNHSALESLALIPLQAPLKIMLQIG 421
309 VPADLNIRRTTKSFRPFVPLLANLYPNANLELQGTVNSEQLVNLSTENLLEEPEMDIEAL 368
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                phospholipid transfer protein precursor - human
NiAlternate names: lipid transfer protein II; PLTP
C.Species: Homo sapiens (man)
C.Species: 27-Jun-1994 #sequence_revision 27-Jun-1994 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                 369 VVLPSSAREPVFRLGVATNVSATLTLTLTRKITGFLKPGRLQVELKESKVGGFNVELLEAL
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                                                                                                                                                                                                                         376 AVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELKHSNIGPFPVELLQDI
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Best Local Similarity 26.9%; Pred. No. 4e-28;
Matches 124; Conservative 95; Mismatches 214; Indels
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                                                                                                                                                                                                                                                                                                                            VQMKGEFYSENHHNPPPFFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLVYQEAGVLKMTLR 312
                                                                                                                                                                                                                                                                                                                                                                    DDMLPPDSNIRLNTKAFRPFTPLITRKYPDWNLELLGTVVSAPLLNVSPGNLSLAPQMEI 364
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                                                                     GNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKK 192
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A; Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C. C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luros, J.S.; Maiti, R.; Marziali, Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A; Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Tallon, ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A; Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A; Reference number: A66141; MUID:21016719; PMID:11130712
A; Ascession: C86183
A; Ascession: C86183
A; Molecule type: DNA
A; Molecule type: DNA
A; Residues: 1-488 <STO>
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A; Molecule type: mRNA
A; Residues: 1-493 < DRA>
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R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; White, O.; Alonso, Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.B.; Conway, A.R.; Creasy, T.H.; Dewar, K.; ansen, N.F.; Hughes, B.; Huizar, L. Nature 408, 816-820, 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .Cross-references: UNIPROT:P55065; EMBL:U37226; NID:g1051265; PIDN:AAA80542.1; PID:g109
Superfamily: lipopolysaccharide-binding protein
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C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Date: 02-Mar-2001 #sequence_revision 02-Mar-2001 #text_change 09-Jul-2004
C;Accession: C86183
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                                                  Query Match 18.5%; Score 463.5; DB 2; Best Local Similarity 26.6%; Pred. No. 5.3e-28; Matches 128; Conservative 108; Mismatches 212;
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A; Cross-references: UNIPROT: P11597; EMBL: M30185; NID: g180259; PIDN: AAA51977.1; PID: g1802
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FAPPV-MEFPAAHDRMVYLGLSDYFFNTAGLVYQEAGVLKMTLRDDMIPKESKFRLTTKF 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FGTFLPEVAKKFPNMKIOIHVSASTPPHLSVQPTGLTFYPAVDVQA---FAVLPNSSLAS 385
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WRFIIPQLYKKYPNQDMNLNISLSSPPLVKISEQ----YVGANVNADLVINVLDANQVIP 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LFLIGMITICSMEVSAESNRLVGELKLDRLLLELKHSNIGPFPVELLQDIMNYIVPILVT, 445
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F;1-17/Domain: signal sequence #status predicted <SIG>
F;18-493/Product: cholesteryl ester transfer protein #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        R; Drayna, D.; Jarnagin, A.S.; McLean, J.; Henzel, W.; Kohr, W.; Fielding, C. Nature 327, 632-634, 1987
A; Title: Cloning and sequencing of human cholesteryl ester transfer protein A; Reference number: A26941; MUID:87258172; PMID:3600759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cholesteryl ester transfer protein precursor - human
C;Species: Homo sapiens (man)
C;Date: 19-Nov-1988 #sequence_revision 19-Nov-1988 #text_change 09-Jul-2004
C;Accession: A26941
R;Drayna, D.; Jarnagin, A.S.; McLean, J.; Henzel, W.; Kohr, W.; Fielding, C. Nature 327, 632-634, 1987
                                                                                                                                                                                                                                                                              152 SNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKKIESALRNKMNSQVCEKVTN
                                                                                                                                                                                                                                                                                                                                                                                                     LKSDEGGLKLSLSECGCHVEDITIEL-EGGASWFYQCMVNAFKDQIGSSVESTIAKKLTE
                                                                                                                       38 VRISQKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSS
                                                                                                                                                                            31 VLVSQNGLDFVKNLLVNKAIASIIPLQIPRIEKSMKIPPLGGIDVVVSNLTIYELDVASS
                                                                                                                                                                                                                                           98 QISMVPNVGLKFSISNANIKISGKWKAQKRF-----LKMSGNFDLSIEGMSISADLKLG
                                                        Gaps
                                                           25;
13.5%; Score 337.5; DB 2; Length 23.6%; Pred. No. 3.1e-18; ive 87; Mismatches 240; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              486
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C;Accession: 146692
R;Asgashima, M.; McLean, J.W.; Lawn, R.M.
R;Asgashima, M.; McLean, J.W.; Lawn, R.M.
J. Lipid Res. 29, 1643-1649, 1988
A;Title: Cloning and mRNA tissue distribution of rabbit cholesteryl ester transfer protes
A;Reference number: 146692, MUID:89215620; PMID:3244015
A;Accession: 146692
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: mRNA
A;Residues: 1-497 <NAG>
A;Cross-references: UNIFROT:P22687; GB:M27486; NID:9530906; PIDN:AAA31199.1; PID:9530907
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : || | : | | : | | : | | : | | : | | : | | : | | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | :
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                                                                                                                                                                                          314
                                                                                                                                                                                                                                                                                                                                                     382 -SLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELKHSNIGPFPVELLQDIMNYIV 440
                                                                                                                                                                                                                                                                                                                                                                                          90 REFQLPSSQISMVPNVGLKFSISNANIKISG-----KWKAQKRFLKMSGNFDLSIEG 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   251
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DVQMKGEFYSENHHNPPPFAPPVMEFP---AAHDRMVYLGLSDYFFNTAGLVYQEAGVLK 308
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                            209 VINSVSSKLQPYFQTLPVMTKIDSVAGINYGLVAPPATTAETLDVQMKGEFYSENHHNP- 267
                                                                                                                                                                                                                                             326 TKFFGT---FLPEVAKKFPNMKIQIHVSASTPPHLSVQPTGLTFYPAVDVQAFAVLPNS- 381
                                                                                                                                                                                                                                                                                               315 TWGFNTNQEIFQEVVGGFPS-QAOVTVHCLKMPRISCONKGVVVNSSVMVKFLFPRPDQQ 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        142 MSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKV------GWLIQLFHK 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    89
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cholesteryl ester transfer protein - rabbit (fragment)
C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
                                                                                                                                                                   VSSSVAVTFRFPRPDGREAVAYRFBEDIITTVQASYSQKKLFLHL-LDFQCVPASGRAGS
                                                           268 -- PPFAPPVMEFPAAHDRWVYLGLSDYFFNTAGLVYQEAGVLKMTLRDDMIPKESKFRLT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30 AAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHLGKGHYSFYSMDI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   192 KIESALRNKANSQVCEKVTNSVSSKLOPYFQTLPVMTKIDSVAGINYGLVAPPATTAETL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  441 PILVLPRVNEKLQKGF-PLPTPARVQLYNVV---LQPHQNFLLFGAD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cholesteryl ester transfer protein - crab-eating macaque (Species: Macaca fascicularis (crab-eating macaque)
C;Species: Macaca fascicularis (crab-eating macaque)
C;Accesion: A53196 #sequence_revision 12-May-1994 #text_change 07-May-1999
C;Accession: A53196 B.F.: Marotti, K.R.; Melchior, G.W.
R;Pape, M.E.; Rehberg, E.F.: Marotti, K.R.; Melchior, G.W.
A;Title: Molecular cloning, sequence, and expression of cynomolgus monkey cholesteryl asma high density lipoprotein levels.
A;Reference number: A53176; MUD:92031355; PMID:1931878
A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TASYLESHHKGHPIYKNVSEDLPLPTFSPTLL---GDSRMLYFWFSERVFHSLAKVAFQ 296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GIDOSIDFEIDS---AIDLOINTOLTCDSGRVRTDAPDCYLSFHKLLLHLQGEREPGWIK 181
                                                                                                                                                                                                                                                                                                                                                                                                                                            QLFHKKIESALRNKMNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGLVAPPAT 246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             304 AGVLKMTLRDDMIPKESKFRLTTKFFGT---FLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PTGLTFYPAVDVQAFAVLPNS--SLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLE 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KTVSNLTESSSESIQSFLQSMITAVGIPEVMSRLEVVFTALMNSKGVSLFDIINPEIITR 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95 PSSQISMVPNVGLKFSISNANIKISGKWK---AQKRFLKMSGNFDLSIEGMSISADLKLG 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNPT--SGKPTITCSSCSSHINSVHVHI-SKSKVGWLIQLFHKKIESALRNKMNSQVCEK 208
                                                                                                                                                                                                                                                           LKHSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGF-PLPTPARVQLYNVV---LQPH 474
                                                                                                                                                              64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OLFTHFISFTLKLVLKGOICKEI-NVISNIMADFVQTRAASILSDGDIGVDISLTGDPVI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAETLDVQMKGEFYSENHHNP----PPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLVYQE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GVVVRISOKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQL
                                                                                                              SLMVLVAIGTAVTAAV --- NPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSF
                                                                                                                                                                                                                      KIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWK---AQKRFL
                                                           Gaps
                                                           38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    34;
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  Length 493;
; Score 295; DB 2; Length 493; Pred. No. 6.2e-15; 92; Mismatches 243; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11.2%; Score 282; DB 2; Length 49
23.8%; Pred. No. 6.4e-14;
.ive 89; Mismatches 233; Indels
Query Match
Best Local Similarity 23.7
Matches 116; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ONFLLFGAD 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DGFLLLQMD 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: mRNA
A; Residues: 1-493 < PAP>
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Best Local S
Matches 111
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Length Indels

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-----IPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSI 111
                                                                                                                                                                                                                                                                             63 GLLGAGGLLGGGGLLSYGGLFSLVEELSG-----LKIEELTLPTVSIKLLPGVGVQLSL 116
                                                                                                                                                                                                                                                                                                                                          SNANIKISGKWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHIN 171
                                                                                                                                                                                                                                                                                                                                                                                                                                   172 SVHVHISKSKVGWLIQLFHKKIESALRNKANSQVCEKVTNSVSSKLQPYFQTLPVMTKID 231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281 --HDRMYYLGLSDYFFNTAGLVYQEAGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAK 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             271 EDHTSOVIVEL--YLENIVEGLIQINGALDIDITPEMVPR--NIPLITIDLAALAPEALG 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KPP---NMKIQIHVSASTPPHLSVQPTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTG 395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     396 SMEVSAESNRLVGELKLDRLLLELKHSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKG 455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       385 NAHLVPSTTKIHISLSLERLIVQLASSFSQPFDASRLEEWLSDVVRAAYMQKINEHLEVG 444
                                                                                                                                                                                    3 PGVYALLLLMGLATPCLGLLETVGTLARIDKDELGKAIQNSLVGGPILQNVLGTVTSVNQ
                                                                                                                                                                                                                                                                                                                                                                       163 TLICHİSLTS-ĞLİPTPIFGLVEQTİCKVLPGLLC-PVVDSVLSVVNELLGATLSLVPLG
                                                                                                                                                          13 PRWVSLMVLVAIGTAVTAAVNP-GVVVRISQKGLDYASQO---GTAALQKELKRIK----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 232 SVAGINYGLVAPPATTAETLDVOMKGEFYSENHHNP--PPFAPPVMEFPAA-----
                A;Cross-references: EMBL:X60658; NID:g57733; PIDN:CAA43065.1; PID:g57734
                                                              Query Match 9.4%; Score 234.5; DB 2; Best Local Similarity 21.8%; Pred. No. 2.9e-10; Matches 109; Conservative 88; Mismatches 229;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             456 FPLPTPARVOLYNVVLQPHQN 476
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A;Residues: 1-473 <DEA>
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                                                                                                                                                                                  RESULT 14
S17447
probable ligand-binding protein RY2G5 - rat (fragment)
C;Species: Rattue norvegicue (Norway rat)
C;Species: Rattue norvegicue (Norway rat)
C;Date: 13-Jan-1995 #sequence_revision 22-May-1998 #text_change 05-Nov-1999
C;Accession: 317447
R;Dear, T.N.; Boehm, T.; Keverne, E.B.; Rabbitts, T.H.
EMBO J. 10, 2813-2819, 1991
A;Title: Novel genes for potential ligand-binding proteins in subregions of the olfactor A;Reference number: $17447
A;Molecule type: mRNA
A;Residues: 1-470 obEA>
A;Cross-references: EMBL:X60660; NID:g57731; PIDN:CAA43067.1; PID:g57732
A;Cross-references: Difactory mucosa
C;Genetics:
A;Gene: RY2G5
C;Keywords: olfaction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CiDate: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_cnange Ub-NOV-1999
CiAccession: S17448
Ribert T. H. Boehm, T.; Keverne, E.B.; Rabbitts, T.H.
EMBO J. 10, 2813-2819, 1991
A;Title: Novel genes for potential ligand-binding proteins in subregions of the olfactor A;Areference number: S17447; MUID:92007724; PMID:1915264
A;Accession: S17448
A;Status: preliminary
A;Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     84 IVELTLPRVSVRLLPGVGVYLSL-YTRVAINGK-----SLIGFLDIAVE-VNITAKV 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     249 YPLGRPAMLPRPQMPELPPMGDNTNSQLAISANFLSSVLTMLQKQGALDIDITDGMF--E 306
  89 IREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKMSGNFDLSIEGMSISADL 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKKIESALRNKMNSQVCEK 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   :| : | | : | | : : | | : : | | 134 RLTMDRT-GYPRLVIERCDILLGGIKVKLLR---GLLPNLVDNLVNRVLANVLPDLLC-P 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               209 VINSVSSKLOPYFOTLPVMTKIDSVAGINYGLVAPPATTAETLDVQMK------GEFYS 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            189 IVDVVIGIVNDQLGLVDSLVPLGILGSVQYTFSSLPLVTGEFLELDLNTLVGEAGGDLID 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         262 ENHHNPPPFAPPVM-EFPAAHDRM-VYLGLSDYFFNTAGLVYQEAGVLKMTLRDDMIPKE 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       320 SKFRLTTKFFGTFLPEVAKKFPNMK-IQIHVSASTPPHLSVQPTGLTFYPAVDVQAFAVL 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      379 PNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELKHSNIGPFPVELLQDIMNY 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          probable ligand-binding protein RYA3 - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 05-Nov-1999
C;Accession: S17448
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 470;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 10.4%; Score 261.5; DB 2; Length Best Local Similarity 22.4%; Pred. No. 2.3e-12; Matches 90; Conservative 80; Mismatches 204; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        439 IVPILVLPRVNEKLOKGFPLPTPARVQLYNVVLQPHQNFLL 479
                                                                     LYNVV 470
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LFEII 465
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| GenCore | (c) 1993 |
| | Copyright |

OM protein - protein search, using sw model

October 21, 2005, 11:22:43 ; Search time 64.7154 Seconds (without alignments) 1455.954 Million cell updates/sec Run on:

US-10-629-516-2_COPY_10_193 943 1 CNAPRWVSLMVLVAIGTAVT.......HVHISKSKVGWLIQLFHKKI 184 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1612378 seqs, 512079187 residues Searched: 1612378 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

UniProt_03:*
1: uniprot_sprot:*
2: uniprot_trembl:* Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | Description | homo | 3 homo |) maca | P17453 bos taurus | Q6axu0 rattus norv | 5 mus | | 0 | - | ព្រាន | рошо | homo | rattus r | Qéglx0 xenopus lae | | Q7t3q8 gadus morhu | | - | _ | - | - | homo | mus | มายา | homo | BUB | | Q8wmq5 oryctolagus | Q95jg0 oryctolagus | ٠, | Q6dei0 brachydanio |
|--------|-------------|-----------|--------|--------|-------------------|--------------------|--------|--------|--------|-----------|-----------|--------|-----------|----------|--------------------|-----------|--------------------|--------|--------|--------|--------|--------|------------|------------|------------|------------|--------|--------|--------------------|--------------------|--------|--------------------|
| | ID | BPI HUMAN | Q8IW58 | Q9GK39 | BPI_BOVIN | Q6AXU0 | Q67E05 | Q8BSF3 | Q9GK40 | BPI_RABIT | LBP_MOUSE | QSTCF0 | LBP HUMAN | LBP_RAT | OEGLX0 | LBP_RABIT | Q7T3Q8 | Q7T3Q9 | Q804Q9 | Q8JFX3 | Q8JFX4 | 081729 | BPL2_HUMAN | BPL2_MOUSE | PLTP_MOUSE | PLTP HUMAN | Q8WMN7 | Q864W2 | QBWMQS | Q95JG0 | Q661U4 | OEDEIO |
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| | Length | 483 | 487 | 179 | 482 | 482 | 483 | 486 | 178 | 445 | 481 | 477 | 481 | 481 | 476 | 482 | 473 | 473 | 473 | 473 | 473 | 477 | 507 | 509 | 493 | 493 | 496 | 48 | 503 | 503 | 483 | 486 |
| Ouerv | | 100.0 | 9.66 | 73.0 | 63.3 | 60.2 | 58.8 | 58.8 | 55.0 | 53.7 | 47.5 | 45.5 | | | - | 37.9 | m | 33.1 | 33.1 | 3 | 3 | ä. | 20.9 | • | • | 17.9 | 17.6 | 16.5 | 16.3 | 16.3 | 15.7 | 15.0 |
| | Score | 943 | 939 | 688 | 596.5 | 567.5 | 554.5 | 554.5 | 518.5 | 506.5 | 448 | 429 | 429 | 428 | 394 | 357.5 | 312.5 | 312.5 | 312.5 | 312 | 311.5 | 222.5 | 197.5 | 186.5 | 172.5 | 169 | 166 | 156 | 153.5 | 153.5 | 148 | 141 |
| Result | No. | - | 7 | 3 | 4 | 2 | 9 | 7 | 80 | 6 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | | 29 | | 31 |

| Q9bg59 tupaia glis P11597 homo sapien Q10011 caenorhabdi P22687 oryctolagus P47896 macaca fasc Q8vyc2 arabidopsis Q9nou2 sus scrofa Q93796 caenorhabdi Q9uct4 homo sapien Q6uvn3 homo sapien Q6uwn3 homo sapien Q6uwn3 homo sapien Q6uwn3 homo sapien Q6zme0 homo sapien Q6zme0 homo sapien |
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| Q9BG59 CETP_HUMAN YSV5_CAEEL CETP_RABIT CETP_MACFA Q9V7C2 Q90VU2 Q90VU2 Q90VT4 BPIL_HUMAN Q6UN3 Q6UN33 |
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ALIGNMENTS

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Protein.
Cleavage sites for elastase (Potential).
Potential.
V -> A (in dbSNP:1341023).
/FIId=VAR 018401.
A -> V (in dbSNP:5743509).
/FIId=VAR 018402.
K -> E (in dbSNP:9783188).
/FIId=VAR 018403.
P -> S (in Ref. 3).
P -> L (in Ref. 2).
N -> D (in Ref. 3).
K -> R (in Ref. 3).
SMART; SM00328; BPI1; 1.
SMART; SM00329; BPI2; 1.
SMART; BP12; 1.
3D-STRUCTURE; PS00400; LBP BPI CETP; 1.
3D-STRUCTURE; AntibioFic; Direct protein sequencing; Glycoprotein; 3D-STRUCTHISM; Signal; Transmembrane.
SIGNAL
28 483 Bactericidal permeability-increasing
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12
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Science 276:1864-1864(1997).

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               Oliver K., Parker A., Patel R., Pearce T.A.V., Peck A.I.,
Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Rammay H.,
Rice C.M., Rose M.T., Scott C.E., Sehra H.K., Shownkeen R., Sims S.,
Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Suleron J.E.,
Swann R.M., Sycamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
Tracey A., Tromans A.C., Vaudin M., Wall M., Walls J.M.,
Whitehead S.L., Whittaker P., Willey D.L., Williams L., Williams S.A.
Wilming L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               X-RAY CRYSTALLOGRAPHY (2.4 ANGSTROMS).
MEDLINE-97)34442; PubMed=918853; DOI=10.1126/science.276.5320.1861;
MEDLINE-97)34442; PubMed=918853; DOI=10.1126/science.276.5320.1861;
MEDLINE-97)34442; PubMed=918853; DOI=10.1126/science.276.5320.1861;
MEDLINE-10.1126/science.276.5320.1861;
"Crystal structure of human BPI and two bound phospholipids at 2.4-A
                                                                                                                                                                   "The DNA sequence and comparative analysis of human chromosome 20."; Nature 414:865-871(2001)
                                                                                                                                                                                                                      SEQUENCE OF 28-42.
MEDLINE=88033057; PubMed=3667613;
Ooi C.E., Wannion B.;
A 25-kDa NH2-terminal fragment carries all the antibacterial activities of the human neutrophil 60-kDa bactericidal/permeability-increasing protein.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SIMILARITY: Belongs to the BPI/LBP/Plunc superfamily. BPI/LBP
   Nickerson T.,
                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=89315847; PubMed=2501794; Gabay J.E., Scott R.W., Campanelli D., Griffith J., Wilde C., Marra M.N., Seeger M., Nathan C.F.; Antibiotic proteins of human polymorphonuclear leukocytes."; Proc. Natl. Acad. Sci. U.S.A. 86:5610-5614(1989).
 Mistry D., Moore M.J.F., Mullikin J.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MIM; 109195; -... GO: Colonest to plasma membrane; TAS. GO: 0005887; C:integral to plasma membrane; TAS. InterPro: IPRO01124; LBP BPI_CETP. Fam: PF01273; LBP_BPI_CETP: I. Pfam; PF02886; LBP_BPI_CETP_C; 1.
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EMBL, AL359555, CAC13043.1; --
EMBL, AL499625, CAC1350.1; --
EMBL, AL391692, CAC10453.1; --
EMBL, AL391692, CAC10453.1; --
PDB, IEMF, X-ray; 0=28-483.
PDB, IEWF, X-ray; 0=28-483.
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Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
NCBI_TaxID=9606;
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Submitted (DEC-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; BCO40955; AAH40955.1; -.
HSSP; P17213; 1EWF.
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InterPro; IRR001124; LBP BPI_CETP.
Pfam; PF01273; LBP_BPI_CETP; 1.
Pfam; PF02886; LBP_BPI_CETP_C; 1.
SMART; SM00328; BPĪ1; Ī.
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TISSUE=Blood;
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93 VPNVGLKFSISNANIKISGKWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTI 152
                                                                                                                                                                                                                                                                                                       61 DSFKIKHLGKGHYSFYSMDIREPQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
                                                                                                                                                                                                                                                                                                                                                                                                           121 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
                                                                                                                                                                                                                                                                                                                                                                                                                                     61 VPNVGLKFSISNANIKISGKWKARKRFIKTSGNFDLSVGGVSISADLKLGSDSTSGKPTV 120
                                                                                                                                                                                                     9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 QKGLDYASQQGTAALQKELKRIKIPDYSGSFKIKJLGKGRYSFYSMDIREFQLPSSQISM
                                                                                                                                                                                                                               10 CNAPRWĄSIAWLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                 10 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL
                                                                                                                                                                                   1 CNAPRWYSIMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MRR-2001 (TrEMBLrel. 16, Created)
01-MRR-2001 (TrEMBLrel. 16, Last sequence update)
01-MRR-2003 (TrEMBLrel. 25, Last annotation update)
Bactericidal/permeability-increasing protein (Fragment).
Macaca mulatta (Rhesus macaque).
Macaca mulatta (Rhesus (Craniata), Vertebrata, Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Cercopithecinae; Macaca.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
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                                                                                                    Length 487;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Xu J., Wang H.;
Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
BNBL; AF322587; AAG42843.1; -.
HSSP; P17213; IEWF.
GO; GO:00008289; F:lipid binding; IEA.
InterPro; IPR001124; LBP BPI CETP.
Ffam; PF01273; LBP BPI CETP; 1.
SMART; SM00328; BPI1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   179 AA; 19772 MW; F1B180A02A38CE63 CRC64;
SMART; SM00329; BPI2; 1.
PROSITE; PS00400; LBP BPI CETP; 1.
SEQUENCE 487 AA; 53880 MW; FE709D9317E5206D CRC64;
                                                                                                    99.6%; Score 939; DB 2;
99.5%; Pred. No. 8.4e-75;
tive 0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCSSCSHINSVHVHISKSKVGWLIQLFHKKI 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SCSSCSSHINSVHVRISNSRVGWLIRLFRKKI 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ż
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 134; Conservative
                                                                                                      Query Match
Best Local Similarity 99.5
Matches 183; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181 HKKI 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 190 HKKI 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=9544;
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123 SGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHK 182
                                                                                   FKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKM 122
                                                                                                                                              :|
RI 188
                                                                                                                            183 KI 184
                                                                                                                                                                                                                                                                                                                 Name=Bpi;
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Q6AXU0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                 DOWAIN: The N-terminal region may be exposed to the interior of the granule, whereas the C-terminal portion may be embedded in the membrane. During phagocytosis and degranulation, proteases may be released and activated and cleave BPI at the junction of the N- and C-terminal portions of the molecule, providing controlled release of the N-terminal antibacterial fragment when bacteria are ingested (By similarity).
                                                                                                                                                                                                                        Increasing protein (BPI)."

Nucleic Acids Res. 18:3052-3052(1990).

-!- FUNCTION: The cytocoxic action of BPI is limited to many species of Gram-negative bacteria; this specificity may be explained by a of Gram-negative bacteria; this specificity may be explained by a strong affinity of the very basic N-terminal half for the negatively charged lipopolysaccharides that are unique to the Gram-negative bacterial outer envelope.

-!- SUBCELLULAR LOCATION: Membrane-associated in polymorphonuclear Leukocytes (PMN) granules (By similarity).

-!- TISSUE SPECIFICITY: Restricted to cells of the myeloid series (By
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cleavage sites for elastase (Potential).
N-linked (GloNAc. .) (Potential).
N-linked (GLONAc. .) (Potential).
N-linked (GloNAc. .) (Potential).
N-linked (GloNAc. .) (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Potential).
(Potential).
(Potential).
(Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bactericidal permeability-increasing
                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Cetartiodactyla, Ruminantia, Pecora, Bovidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63.3%; Score 596.5; DB 1; Length 482; 63.2%; Pred. No. 2e-44;
01-AUG-1990 (Rel. 15, Created)
01-AUG-1990 (Rel. 15, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Bactericidal permeability-increasing protein precursor (BPI).
                                                                                                                                                                                                  Leong S.R., Camerato T.; "Nucleotide sequence of the bovine bactericidal permeability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ze-44;
-hem 37; Indelm
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -linked (GlcNAc. . .) (Po
DD7D59AE785BC42D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GlcNAc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROSITE, PS00400, LBP BPI CETP, 1.
Antibiotic, Glycoprotein; Membrane, Signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Fred. NO. 2e-4
29; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N-linked
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EMBL, X52563, CAA36797.1; -. HSPP, $10180, $10180. HSPP, $10180, $10180. HSPP, PT7213, 1EWF.
InterPro; IPR001124, LBP_BPI_CETP.
Pfam; PF02186; LBP_BPI_CETP; 1. SMART; SM00328; BPII; 1. SMART; SM00329; BPII; 1.
                                                                                                                                                        SEQUENCE FROM N.A.
TISSUE=Bone marrow;
MEDLINE=90272418; PubMed=2349103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                53432 MW;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62
303
375
389
463
482 AA;
                                                                        Bos taurus (Bovine)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 115; Conserv
                                                                                                               Bovinae; Bos.
NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                        Bimilarity).
                                                          Name=BPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CARBOHYD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CARBOHYD
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Straubberg R.L., Feingold B.A., Grouse J.G.,

Straubberg R.L., Feingold B.A., Grouse J.G.,

Altschul S.P., Zebeberg B. Buetow K.H., Schaefer C.F., Bhat N.K.,

Altschul S.P., Zebeberg B. Buetow K.H., Schaefer C.F., Bhat N.K.,

And Strauble R.F., Jordan H., Moore T., Max S.I., Wang J., Haiteh F.,

And Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.B.,

Brownstein M.J., Usdin T.B., Tochiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Rabask S.A., McKernan R.J., Maramson R.D., Mullahy S.J.,

Rabask S.A., McKernan B.J., Lu X., Glabs R.A.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

Rhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Mhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,

T. "Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 NAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSD 61
                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalla, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
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llarity 59.6%; Pred. No. 7.6e-42;
Conservative 29; Mismatches 44; Indels 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Director MGC Project;
Submitted (AUG-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; BC079318; AAH79318.1; -.
GO; GO: 00002289; F:1kpid binding; IEA.
INTERPRO; IPR001124; LBP BPI CETP.
Pfam; PF01273; LBP BPI CETP.
Pfam; PF02866; LBP BPI CETP.C.; I.
SMART; SM00328; BPI1; I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            482 AA; 53751 MW; 269591C4C2F5A6D1 CRC64;
                                                               25-OCT-2004 (TrEMBLrel. 28, Created)
25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                   Bactericidal/permeability-increasing protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PubMed=12477932; DOI=10.1073/pnas.242603899;
482 AA.
PRT;
PRELIMINARY;
                                                                                                                                                                                                                                                                   Rattus norvegicus (Rat).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 109; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                           NCBI_TaxID=10116;
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APRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDS

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NCBI_TaxID=10090;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
ä
                                                      185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 SFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLK 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                               122 MSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFH 181
 121
                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                       2 NAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKBLKRIKIPDYSD 61
                                                                                                                                                                                                                                                                                                                                                                                                  SFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLK
                                              MSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFH
                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Mus musculus adult male epididymis cDNA, RIKEN full-length enriched library, clone:9230105K17 product:weakly similar to bactericidal/permeability-increasing protein.
                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                   Length 483;
                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
STRAIN-Swies Webster;
Bingla-Swies Webster;
Bingla-C.D., Craven J.;
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
EMBL, AN363993, AR132891, -.
Interpro; IRR001124; LBP BPI_CETP.
Pfam; PF02864; LBP_BPI_CETP.
Pfam; PF02864; LBP_BPI_CETP.
SWART; SM00329; BPII; 1.
SWART; SM00329; BPII; 1.
                                                                                                                                                                                                                                                                                                                                   483 AA; 53940 MW; 4AA2D48095C52B74 CRC64;
                                                                                                                                                                25-OCT-2004 (TrEMBLrel. 28, Last sequence update) 25-OCT-2004 (TrEMBLrel. 28, Last annotation update) Bactericidal/permeability-increasing protein. Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                       43;
                                                                                                                                                                                                                                                                                                                                                   DB 2;
                                                                                                                                                                                                                                                                                                                                                    58.8%; Score 554.5; DB 2 57.9%; Pred. No. 1.1e-40;
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                                                                                                                                       483 AA
                                                                                                                                                                                                                                                                                                                                                                      Matches 106; Conservative 33; Mismatches
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                                                                                                                                                         Created)
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                                                                                                                                                        (TrEMBLrel. 28,
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                                                                                                                                       PRELIMINARY;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
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RKI 188
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RKI 188
                                                                                                                                                                                                                         NCBI_TaxID=10090;
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                                                                         KKI 184
                                                                                                                                                Q67E05;
25-OCT-2004
  62
                    67
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Q8BSF3
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Q67E05
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SEQUENCE FROM N.A.

STRAIN=C57BL/6J; TISSUE=Epididymis;

KRAIN=C57BL/6J; TISSUE=Epididymis;

KRDINES-0539913; PubMed=1107664;

KNDINES-0539913; PubMed=1107664;

KOINO H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M.,

KOINO H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M.,

KOINO H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M.,

KOINO H., Ishii Y., Nakamura S., Hazama M., Nishine T., Kashiwagi K.,

Rujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watchiki M.,

Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.,

Nokazaki Y., Muramatsu M., Inoue Y., Kitra A., Hayashizaki Y.;

RIKEN Integrated sequence analysis (RISA) system-384-format

Requencing pipeline with 384 multicapillary sequencer.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-CS7BL/6J; TISSUE=Epididymis;
MEDLINE=20499374; PubMed=11042199; DOI=10.1101/gr.145100;
Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M.,
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
"Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length CDNA lbraries for rapid discovery of new genes.";
Genome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the RIKEN Genome Exploration Research Group Phase I & II Team; "Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs.":
STRAIN=C57BL/6J; TISSUB=Epididymis; MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9; Carninol P., Hayashizaki Y.; Hidh-efficiency full-length cDNA cloning."; Meth. Enzymol. 303:19-44(1999).
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                                                                                                                                                                                                                                                                                                                                                                                                "Punctional annotation of a full-length mouse cDNA collection."; Nature 409:685-690(2001).
                                                                                                                                                                                                                                                                                                   STRAIN=C57BL/6J; TISSUE=Epididymis;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
RIKEN FANTOM CONSOTTIUM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     54351 MW; 9D8F627EA5496D62 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A.
STRAIN-CSTBL/GJ; TISSUE-Epididymis;
The FANTOM CONSOCTIUM,
The RIKEN Genome Exploration Resear
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STRAIN=C57BL/6J; TISSUE=Epididymis;
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Pfam; PF01273; LBP BPI CETP; 1.
Pfam; PF02886; LBP BPI CETP; 1.
SMART; SM0328; BPII; 1.
SMART; SM0329; BPII; 1.
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GO; GO:0008289; F:lipid binding;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; AK033770; BAC28468.1;
HSSP; P17213; 1BP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60,770 full-length cDNAs.";
Nature 420:563-573(2002).
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SEQUENCE FROM N.A.
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SEQUENCE FROM N.A.
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Length 486;

DB 2;

Score 554.5;

58.8%;

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Eukaryota; Metazoa;
Mammalia; Eutheria;
NCBI TaxID=9986;
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LBP_MOUSE
ID _ LBP_M
AC Q6180
DT 01-NO
DT 01-NO
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                                                                                                                 93 VPNVGLKFSISNANIKISGKWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTI 152
                                                                  SFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLK 121
                              61
                                               99
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                                       2 NAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
           Gaps
                                                                                                                                                                                                                                                                    Oryctolagus cuniculus (Rabbit).

Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Lagomorpha, Leporidae, Oryctolagus.
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01-NOV-1997 (Rel. 35, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Bactericidal permeability-increasing protein (BPI) (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                              55.0%; Score 518.5; DB 2; Length 178; 62.5%; Pred. No. 5.5e-38; ive 29; Mismatches 27; Indels 1.
           43; Indels
                                                                                                                                                                                                                                           01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
Bactericidal/permeability-increasing protein (Fragment).
                                                                                                                                                                                                                                                                                                                               Xu J., Wang H.;
Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
EMBL, AF322586; AAG42842.1; -.
HSSP; P17213; 1BP1.
                                                                                                                                                                                                                                                                                                                                                                                                                          178 AA; 19693 MW; 867D7C6CA14B3A75 CRC64;
 Pred. No. 1.1e-40;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCSSCSSNINRARLRVS-GILGWLLKLFHKRI 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCSSCSSHINSVHVHISKSKVGWLIQLFHKKI 184
          33; Mismatches
                                                                                                                                                                                                                                                                                                                                                                  GO; GO:0008289; F:lipid binding; IEA.
InterPro; IRR001124; LBP BPI CETP.
PF01273; LBP BPI CETP; 1.
SWART; SM00328; BPII; 1.
                                                                                                                                                                                                                                  Created)
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Oryctolagus cuniculus (Rabbit)
 57.9%;
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           Matches 106; Conservative
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les 95; Conserv
  Best Local Similarity
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RKI 188
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Q28739;
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SEQUENCE
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                     similarity).

Downin: The N-terminal region may be exposed to the interior of the granule, whereas the C-terminal portion may be embedded in the membrane. During phagocytosis and degranulation, proteases may be released and activated and cleave BPI at the junction of the N-and C-terminal portions of the molecule, providing controlled release of the N-terminal antibacterial fragment when bacteria are
                                                                                             33 QKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ingested (By similarity).
SIMILARITY: Belongs to the BPI/LBP/Plunc superfamily. BPI/LBP
Chordata, Craniata, Vertebrata, Euteleostomi,
Lagomorpha, Leporidae, Oryctolagus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           53.7%; Score 506.5; DB 1
62.5%; Pred. No. 1.8e-36;
iive 26; Mismatches 30
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N-linked (GlcNAc.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            InterPro; IPR001124; LBP BPI CETP.
Pfam; PF01273; LBP BPI CETP; 1.
Pfam; PF02886; LBP BPI CETP; 1.
SMART; SM00128; BPII; 1.
SMART; SM00129; BPII; 1.
PROSITE; PS00400; LBP BPI CETP; PARTIAL.
Antibiotic; Glycoprotein; Transmembrane.
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Best Local Similarity 62.5#
Matches 95; Conservative
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352
445 AA;
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                                                                                                                                                                                                                                                                                                                                         ACCURANCE TOWN NA. N. September 2. S. J. Bubbed=12477932; DOI=10.1073/pnas.242603899; Straubbberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Atlausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altachul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Bartchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Rapleton M., Soares M.B., Bonaldo M.P., Carainci P., Frange C., A. Brownstein M.J., Usdin T.B., Toobhlyuki S., Carainci P., Prange C., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Basak S.A., McKennan R.J., Malek J.A., Gunaratne P.H., Althorn E., Ketreman M., Madan A., Gabbs R.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., Pahelton E., Ketreman M., Madan A., Rodrigues S., Sanchez A., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Antterfield Y.S.N., Krzywinski M.I., Skalska U., Smills D.E., A Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smills D.E., A Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smills D.E., A Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smills D.E., A Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smills D.E., A Bonerch A., Schein J.E., Jones S.J.M., Marra M.A., Tonchman T.M., Schein J.S., Marra M.A., Tonchman T.M., Schein J.S., Marra M.A., Tonchman T.M., Schein J.S., Marra M.A., Schein J.E., Jones S.J.M., Marra M.A., Tonchman T.M., Schein J.S., Marra M.A., Tonchman T.M., Schein J.S., Marra M.A., Schein J.E., Jones S.J.M., Marra M.A., Tonchman T.M., Schein J.S., Marra M.A., Tonchman T.M., Schein J.S., Marra M.A., Schein J.E., Jones S.J.M., Marra M.A., Tonchman T.M., Schein J.S., Marra M.A., Schein J.S., Marra M.A., Schein J.S., Marra M.A., Schein J.S., Marra M.A., Schein J.S., Marra M.A., Schein J.S., Marra M.A., Schein J.S., Marra M.A., Schein J.S., Marra M.A., Schein J.S., Marra M.A., Schein J.S., Marra M.A., Schein J.S., Marra M.A., Sch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@lab-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).

-!- FUNCTION: Binds to the lipid a moiety of bacterial lipopolysaccharides (LPS), a glycolipid present in the outer membrane of all Gram-negative bacteria. The LBP/LPS complex seems to interact with the CD14 receptor.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the BPI/LBP/Plunc superfamily. BPI/LBP
                                                                                                                                                                                     MEDINE=97289150; PubMed=9144073;
Lengacher S., Jongeneel C.V., le Roy D., Lee J.D., Kravchenko V.,
Ulevitch R.J., Glauser M.P., Heumann D.;
"Reactivity of murine and human recombinant LPS-binding protein (LBP)
within LPS and Gram-negative bacteria.";
                                              Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MGD; MGI:1089776; Lbp.
GO; GO:0001530; F:lipopolysaccharide binding; IDA.
GO; GO:0001530; F:lipopolysaccharide binding; IDA.
InterPro; IPRO01124; Lbp BPI_CETP.
Pfam; PF02886; LBP BFI_CETP.
Pfam; PF02886; LBP BFI_CETP.
SMART; SM00329; BFII; I.
PROSITE; PS00400; LBP BFI_CETP; I.
Antibiotic; Glycoprotein; Lipid transport; Signal; Transmembrane.
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N-linked (GlcNAc. .) (Potential).
N-linked (GlcNAc. .) (Potential).
C -> G (in Ref. 2).
K -> Q (in Ref. 2).
                    Lipopolysaccharide-binding protein precursor (LBP)
  05-JUL-2004 (Rel. 44, Last annotation update)
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EMBL; BC004795; AAH04795.1; -
HSSP; P17213; 1EWF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and mouse cDNA sequences.";
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127 GSFDLDVKGVTISVDLLLGMDP-SGRPTVSASGCSSRICDLDVHIS-GNVGWLLNLFFHNO 184
                                                                                                                                                                                                                                                                                                        124 GNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKK 183
                                                                                                                                                                                                                                                   64 KIKHLGKGHYSFYSMDIREPOLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKMS 123
                                                                                                                                                                                            63
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                                                                                                                                                                                                           4 PRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSF
                                                                                                                                                                 2; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Enkaryota, Merazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                         DB 1; Length 481;
                                                                                                                                                                   51; Indels
102 R -> S (in Ref. 2).
280 A -> S (in Ref. 2).
310 H -> P (in Ref. 2).
313 G -> S (in Ref. 2).
341 R -> G (in Ref. 2).
382 S -> G (in Ref. 2).
396 TR -> NS (in Ref. 2).
418 I -> M (in Ref. 2).
53312 MW; 34EA9C066C9AB678 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Strausberg R.;
Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Created)
Last sequence update)
Last annotation update)
                                                                                                                                      Query Match
47.5%; Score 448; DB 1
Best Local Similarity 47.0%; Pred. No. 3e-31;
Matches 85; Conservative 43; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRT; 477 AA.
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01-JUN-2002 (TrEMBLrel. 21,
01-OCT-2003 (TrEMBLrel. 25,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cDNA sequences.
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Homo sapiens (Human)
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01-JUN-2002
  CONFLICT
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sequencing of human lipopolysaccharide-binding protein

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'Cloning and
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EMBL;
                                                                                                                                                                                                                                                                                                                                                                                                     69 GKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKMSGNFDL 128
                                                                                                                                                                                                                                                                                                                                                                                                                            GRGRYEFHSLNIHSCELLHSALRPVPGQGLSLSISDSSIRVQGRWKVRKSFFKLQGSFDV 131
                                                                                                                                                                                                                                                                                                                                         MEDLINE=98110577; PubMed=9441745; DOI=10.1006/geno.1997.5030; Kirsching C.J., Au-Young J., Lamping N., Reuter D., Pfeil D., Sellhamer J.J., Schumann R.R.; Sellhamer J.J., Schumann R.R.; Sellhamer J.J., Schumann R.R.; and phospholipid transfer protein (PLTP) genes suggests a common gene family of lipid-binding proteins."; Genomics 46:416-425(1997)
                                                                                                                                                                                                                                                                                                               9 LMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKKI 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=94292492; PubMed=7517398; Wilde C.G., Seilhamer J.J., McGrogan M., Ashton N., Snable J.L., Land G.C., Leong S.R., Thornton M.B., Miller K.L., Scott R.W.; Bactericidal/permeability-increasing protein and lipopolysaccharide (LPS)-binding protein. LPS binding properties and effects on LPS-mediated cell activation.";
                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=90385281; PubMed=2402637; Schumann R.R., Leong S.R., Flaggs G.W., Gray P.W., Wright S.D., Mathison J.C., Tobias P.S., Ulevitch R.J.; Science 249:1429-1431(1990).
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                                                                                                                                                                                                                          Length 477;
                                                                                                                                                                                                                                                                    54; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hubacek J.A., Aslanidis C., Schmitz G.;
Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
                  GO, GO:0008289; F:lipid binding; IEA.
InterPro; IRR001124; LBP_BPI_CETP.
Pfam; PP01273; LBP_BPI_CETP_1.
SMART; SM00328; BPI]; I.
SMART; SM00328; BPI]; I.
PROSTTE; PRO$4000; LBP_BPI_CETP_7.
SROQSTE; PS004000; LBP_BPI_CETP; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LBP HUMAN STANDARD; PRT; 481 AA. P18428; 043438; Q92672; Q9H403; Q9UD66; 101.NOV-1990 (Rel. 16, Created) 15-DEC-1998 (Rel. 37, Last sequence update) 05-JUL-2004 (Rel. 44, Last annotation update) Lipopolygaccharide-binding protein precursor (LBP)
                                                                                                                                                                                                                        ch 45.5%; Score 429; DB 2; Similarity 46.6%; Pred. No. 1.5e-29; B2; Conservative 38; Mismatches 54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Biol. Chem. 269:17411-17416(1994).
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HSSP; P17213; 1EWF
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                                                                                                                                                                                                                          Query Match
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LEBP HUMAN

LEBP HOLEN

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                                                                                         MEDLINE=21638749; PubMed=11780052; DOI=10.1038/414865a;
MEDLINE=21658749; PubMed=11780052; DOI=10.1038/414865a;
MeDLINE=21658749; PubMed=11780052; DOI=10.1038/414865a;
Deloukas P., Matthews L.H., Ashurst J.L., Burton J., Gilbert J.G.R.,
Deloukas P., Barlow K.F., Bares K.M., Beare D.M.,
Bailey J., Barlow K.F., Bares K.M., Beare D.M.,
Buck D., Burxill W.D., Bultler A.P., Carder C., Carter N.P.,
Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,
Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,
Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,
Blington A.G., Frankland J.A., Fraser A., French L., Garner P.,
Grafham D.V., Gariffiths C., Griffiths M.N.D., Gwilliam R., Hall R.E.,
Hummond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
Huckle E., Hunt A.R., Hunt S.E., Jekosch K., Johnson D.,
Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
Lehvaeslaiho M.H., Leversha M.A., Lloyd C., Lloyd D.M., Lovell J.D.,
Marsh V.L., Martin S.L., McConnachie L.J., McLay K., McKurray A.A.,
Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,
A kuce C.D., Smith M.L., Socherlund C., Steward C.A., Sulston J.E.,
Swann R.M., Sycamore N., Taylor R., Thomas D., Walliams E., Williams E., Whitehead S.L., Whitteker P., Willey D.L., Williams L., Williams S.A.,
Whitehead S.L., Whittaker P., Willey D.L., Williams L., Williams S.A.,
Whithing L., Waray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -i- FUNCTION: Binds to the lipid a moiety of bacterial lipopolysaccharides (LPS), a glycolipid present in the outer membrane of all Gram-negative bacteria. The LBP/LPS complex seems to interact with the CD14 receptor.

-i- SUBCELLULAR LOCATION: Secreted.

-i- SIMILARITY: Belongs to the BPI/LBP/Plunc superfamily. BPI/LBP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     comparative analysis of human chromosome 20.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3D-STRUCTURE MODELING.
MEDIATE=9827862; PubMed=9568897;
Beamer L.J. Carroll S.F., Eisenberg D.;
"The BPI/LBP family of proteins: a structural analysis of conserved
                     gene.";
Sheng Wu Hua Xue Yu Sheng Wu Wu Li Jin Zhan 25:469-471(1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 1-41 FROM N.A.
Sutton C.L., Smith R.I.F., Centola M.B., Theofan G.;
Submitted (MAY-1995) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOINED.
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EMBL, X98657; CAA67226.1; --
EMBL, X98659; CAA67226.1; JOINED.
EMBL, X98659; CAA67226.1; JOINED.
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CAA67226.1; J
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X98661; CAA67226.1;
X98662; CAA67226.1;
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CAA67226.1;
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Nature 414:865-871(2001)
                                                                                SEQUENCE FROM N.A.
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TISSUE-Liver; Long J.Y., Liu J.Q., Xue Y.N., Wang H.X.;

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SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      72 GRGRYEFHSLNIHSCELLHSALRPVPGQGLSLSISDSSIRVQGRWKVRKSFFKLQGSFDV 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           68
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         129 SIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKKI 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
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N-linked (GlcNAc. .) (Potential).
N-linked (GlcNAc. .) (Potential).
N-linked (GlcNAc. .) (Potential).
N-linked (GlcNAc. .) (Potential).
R -> H (in Ref. 2).
E -> C (in Ref. 2).
S -> F (in Ref. 4).
VTAS. -> GYCL (in Ref. 4).
VTAS. -> GYCL (in Ref. 4).
L -> S (in Ref. 4).
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L -> F (in Ref. 4).
L -> F (in Ref. 4).
L -> F (in Ref. 2).
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GO; GO:0005635; P:acute-phase response; TAS.
GO; GO:0005963; P:cellular defense response; TAS.
GO; GO:0005963; P:cellular defense response; TAS.
GO; GO:0005618; P:cellular defense response; TAS.
GO; GO:0009618; P:cellular defense response; TAS.
InterPro; IPR001124; LBP BPI CETP.
InterPro; IPR001124; LBP BPI CETP.
FMART; SM00328; BPII; I.
SMART; SM00328; BPII; I.
SMART; SM00329; BPII; I.
AMART; PS004400; LBP BPI CETP; 1.
AMART; COMO400; LBP BPI CETP; 1.
AMART; COMO400; LBP BPI CETP; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38; Mismatches
                       AF013500; AAC39547.1; JOINED. AR013501; AAC39547.1; JOINED. AR013502; AAC39547.1; JOINED. AR013503; AAC39547.1; JOINED. AR013504; AAC39547.1; JOINED. AR013504; AAC39547.1; JOINED. AR013504; AAC39547.1; JOINED. AR013509; AAC39547.1; JOINED. AR013509; AAC39547.1; JOINED. AR013510; AAC39547.1; JOINED. AR013510; AAC39547.1; JOINED. AR013510; AAC39547.1; JOINED. AR013511; AAC39547.1; JOINED. AR013511; AAC39547.1; JOINED. AR0105067; AAD21962.1; ---
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                                                  EMBL, AF013501, AC39547.1; JOERBL, AF013502, AC39547.1; JOERBL, AF013502, AC39547.1; JOERBL, AF013502, AC39547.1; JOERBL, AF013504, AC39547.1; JOERBL, AF013505, AC39547.1; JOERBL, AF013509, AC39547.1; JOERBL, AF013509, AC39547.1; JOERBL, AF013509, AC39547.1; JOERBL, AF013511; AC39547.1; JOERBL, AF013511; AC39547.1; JOERBL, AF013509, AC39547.1; JOERBL, AF013509, AC39547.1; JOERBL, AF013509, AC39547.1; JOERBL, AF013509, AC39647.1; JOERBL, AF013509, AC39647.1; JOERBL, AF013509, AC30962.1; JOERBL, AS9843.3, AS8843.4
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nes 82; Conservative
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MIM; 151990; -.
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation. The European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                 STRAINE-Sprague-Dawley; TISSUR=Liver;

MEDLINE-91292804; PubMed-8021509;

MEDLINE-91292804; PubMed-8021509;

Billiar T.R., Freeswick P.D., Geller D.A., Wang O., Shapiro R.A., Wan Y.H.,

Billiar T.R., Tweardy D.J., Simmons R.L., Wang S.C.;

"Molecular cloning, characterization, and tissue distribution of rat lipopolysaccharide binding protein. Evidence for extrahepatic expression.";

J. Immunol. 153:74-752 (1994).

I. J. Immunol. 153:74-752 (1994).

I. FUNCTION: Binds to the lipid a moiety of bacterial ipopolysaccharides (LPS), a glycolipid present in the outer membrane of all Gram-negative bacteria. The LBP/LPS complex seems to interact with the CD14 receptor.

C. I. SUBCELJULAR LOCATION: Secreted.

SIMILARITY: Belongs to the BPI/LBP/Plunc superfamily. BPI/LBP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64 KIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKMS 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKK 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63
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R REMBLY, 132246; IS6246.

R HSSP, P17213; IEWP.

R RGD, 61865; LbD.

R RGD, 61865; LbD.

R RGD, 61865; LbP BPI_CETP.

DR Pfam; PF02886; LBP BPI_CETP.

DR RAMRT; SM00129; BPI2; 1.

BRART; SM00329; BPI2; 1.

DR RAMRT; SM00329; BPI2; 1.

DR RAMRT; SM00400; LBP BPI_CETP; 1.

DR AAATiblotic; Glycoprotein; Lipid transport; Signal; Transmembrane.

KW Antiblotic; Glycoprotein; Lipid transport;

CTANAI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 PRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSF
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Rattus.
NCBI_TaxID=10116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26 481 Lipopolyaaccharide-binding protein. 300 300 N-linked (GlcNAc. .) (Potential). 355 355 N-linked (GlcNAc. .) (Potential). 481 AA; 53600 MW; 23E67CB9CC97D2FC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       45.4%; Score 428; DB 1;
44.2%; Pred. No. 1.8e-29;
05-JUL-2004 (Rel. 44, Last annotation update)
Lipopolysaccharide-binding protein precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        45; Mismatches
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127 DLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKKI 184
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                                                                                             STANDARD:
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387
57
63
482 AA;
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Matches 73; Conserv
                                                                                                                                                                                                                                                                                                                                                       SEQUENCE OF 27-66.
                                                                                                                                                                                                                            NCBI_TaxID=9986;
                                                                                                                                                                                                                                                                                                                                                                     TISSUE=Serum;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               family.
                                                                                             LBP RABIT
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                                                                                 LBP_RABIT
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    ò
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Straubberg R.D., Colling F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schafer C.F., Bahar N.K.,
Altschul S.F., Zeeberg B., Buetow K.H., Schafer C.F., Bahar N.K.,
Hopking R.F., Jordan H., Moore T., Max S.I., Hang J., Hsieh F.,
Aspleton M., Soarse M.B., Bonaldon M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Usdin T.B., Toophyuki S., Carninci P., Frange C.,
Brownstein M.J., Usdin T.B., Toophyuki S., Carninci P., Frange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Brokesk S.A., McKwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
Richards S., Worley K.C., Hale S., Garcaran R.J., Lu X., Glibbs R.A.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Glibbs R.A.,
Nhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakeshey W., Helton B.K., Ketteman M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
M. Generation and initial analysis of more than 15,000 full-length human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          67 HLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKMSGNF 126
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LTFLFSMAAFVGATDTGNPGFVVRLTQKGLDYALQEGMIVLQQQLFQIQLPDFSGTYDVG 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Gaps
                                                                                             Xenopus laevis (African clawed frog).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoldea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W., Richardson P., "Genetic and genomic tools for Xenopus research: The NIH Xenopus
                                                                                                                                                                                          IISSUE-Brain;
MEDLINE-22388257; PubMed-12477932; DOI-10.1073/pnas.242603899;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE=22341132; PubMed=12454917; DOI=10.1002/dvdy.10174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
TISSUE=Brain;
Klein S., Gerhard D.S.;
Submitted (UNI-2004) to the EMBL/GenBank/DDBJ databages.
EMBL; BC074326; AAH74326.1; -...
GO; 0008289; F:11pid binding; IRA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       476 AA; 52117 MW; 595F36DB5AB8B05D CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                          Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41.8%; Score 394; DB 2;
44.9%; Pred. No. 1.8e-26;
iive 36; Mismatches 60
    476 AA
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InterPro; IPR001124; LBP_BPI_CETP.
Pfam; PF03748; Fili.
Pfam; PF01273; LBP_BPI_CETP; 1.
Pfam; PF02886; LBP_BPI_CETP_C; 1.
SMART; SM00328; BPII; 1.
                              Created)
                                           05-JUL-2004 (TrEMBLrel. 27, 05-JUL-2004 (TrEMBLrel. 27,
                            (TrEMBLrel. 27, (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dev. Dyn. 225:384-391 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                and mouse cDNA sequences."
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80; Conservative
    PRELIMINARY;
                                                                                                                                        Xenopodinae; Xenopus
                                                                                                                                                                             SEQUENCE FROM N.A.
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                                                                    MGC84153 protein.
                                                                                                                                                   NCBI_TaxID=8355;
                                                                                  Name=MGC84153;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rissum=Brain;
                            05-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        initiative.
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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ب
127 NIKVLGISISVGLILGSD-ESGRPTIAPSDCSCHISNVEVHMS-GTIGMLVDLFHNNV 182
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InterPro; IPR001124; LBP BPI_CETP.
Ffam; PP01273, LBP BPI_CETP.
Ffam; PP01273, LBP BPI_CETP.
SMART; SM00328; BPI2; I.
SMART; SM00329; BPI2; I.
Antibiotic; PS0040; LBP BPI CETP; I.
Antibiotic; Direct protein sequencing; Glycoprotein; Lipid transport; Signal; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  J. Exp. Med. 164:777-793 (1986).
-!- FUNCTION: Binds to the lipid a moiety of bacterial
lipopolysacharides (LSS), a glycolipid present in the outer
membrane of all Gram-negative bacteria. The LBP/LPS complex seems
to interact with the CD14 receptor.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the BPI/LBP/Plunc superfamily. BPI/LBP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gapa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEDLINE=86306528; PubMed=2427635;
Tobias P.S., Soldau K., Ulevitch R.J.;
"Isolation of a lipopolysaccharide-binding acute phase reactant from
rabbit serum.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Lagomorpha, Leporidae, Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lipopolysaccharide-binding protein.
N-linked (GLONAC. .) (Potential).
N-linked (GLONAC. .) (Potential).
N-linked (GLONAC. .) (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
MEDLINE=90385281; PubMed=2402637;
Schumann R.R., Leong S.R., Flaggs G.W., Gray P.W., Wright S.D.,
Mathison J.C., Tobias P.S., Ulevitch R.J.;
"Structure and function of lipopolysaccharide binding protein.";
Science 249:1429-1431(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E -> G (in Ref. 2).
S -> F (in Ref. 2).
628A6E0A647200C2 CRC64;
                                                                                                                                                                                                                                                                     01-AUG-1990 (Rel. 15, Created)
01-NOV-1990 (Rel. 16, Last sequence update)
05-UUL-2004 (Rel. 44, Last annotation update)
Lipopolysaccharide-binding protein precursor (LBP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26
482
301
351
N
387
57
63
54001 MW;
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Search completed: October 21, 2005, 11:30:50 Job time : 66.7154 secs

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GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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OM protein - protein search, using sw model

October 21, 2005, 11:22:43 ; Search time 171.285 Seconds (without alignments) 1455.954 Million cell updates/sec Run on:

US-10-629-516-2 2507 1 MRENMARGPCNAPRWVSLMV......NVVLQPHQNFLLFGADVVYK 487 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1612378 Total number of hits satisfying chosen parameters:

1612378 segs, 512079187 residues

Searched:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

UniProt 03:*
1: uniprot sprot:*
2: uniprot trembl:* **Database**:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Description | œ | ~ | m | о О | Q6axu0 rattus norv | Q67e05 mus musculu | Q8bsf3 mus musculu | Q6glx0 xenopus lae | | Q8tcf0 homo sapien | Q63313 rattus norv | | | Q8jfx3 oncorhynchu | | | | | Q9gk39 macaca mula | Q9gk40 oryctolagus | Q8nfq6 homo sapien | Q8c186 mus musculu | . P55058 homo sapien | PS5065 mus musculu | Q8i7z9 crassostrea | Q8wmn7 sus scrofa | Q66iu4 xenopus lae | | Q95jg0 oryctolagus | | Q8vyc2 arabidopsis |
|----------------------------|----------|-----------|-----------|-----------|--------------------|--------------------|--------------------|--------------------|-----------|--------------------|--------------------|-----------|-----------|--------------------|--------|--------|--------|--------|--------------------|--------------------|--------------------|--------------------|----------------------|--------------------|--------------------|-------------------|--------------------|--------|--------------------|--------|--------------------|
| ΙD | Q8IW58 | BPI_HUMAN | BPI_BOVIN | BPI_RABIT | Q6AXU0 | Q67E05 | Q8BSF3 | OGELX0 | LBP HUMAN | Q8TCF0 | LBP RAT | LBP_MOUSE | LBP_RABIT | QBJEX3 | Q8JFX4 | 080409 | Q7T3Q8 | Q7T3Q9 | Q9GK39 | Q9GK40 | BPL2 HUMAN | BPL2 MOUSE | PLTP_HUMAN | PLTP_MOUSE | Q817 <u>Z</u> 9 | Q8WMN7 | Q661U4 | QBWMQS | Q95JG0 | QEDEIO | Q8VYC2 |
| ength DB | 487 2 | 483 1 | • | 445 1 | ~ | 483 2 | 486 2 | 476 2 | 481 1 | 477 2 | 481 1 | 481 1 | 482 1 | 473 2 | 473 2 | 473 2 | 473 2 | ••• | 179 2 | • | 507 1 | 509 1 | 493 1 | | | | | | 503 2 | | 515 2 |
| * Query Match Length | 99.7 | 99.5 | 64.9 | 60.1 | 56.5 | 54.3 | 53.8 | 45.7 | 43.4 | 42.4 | 41.4 | 41.1 | 39.3 | 34.7 | 34.6 | | 32.5 | • | 32.3 | 24.8 | 21.6 | 20.0 | 18.5 | 18.5 | • | 17.9 | 17.3 | 17.3 | 17.3 | 17.0 | 15.4 |
| Score | 2500 | 2486 | 1627.5 | 1507.5 | 1415.5 | 1361 | 1349.5 | 1145.5 | 1088 | 1062 | 1039 | 1030 | 985.5 | 870.5 | 867.5 | 867 | 814 | 814 | 811 | 621.5 | 541 | 500.5 | 465 | 463.5 | 452.5 | 450 | 434 | 433.5 | 433.5 | 425 | 386.5 |
| Result No. | - | 7 | ٣ | 4 | ហ | 9 | 7 | 80 | 6 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | | 27 | 28 | | 30 | 31 |

| Ogmaus arabidopsis (81a18 arabidopsis (91tr5 arabidopsis 191597 homo sapien (65mm) homo sapien (65mm) homo sapien (65mm) homo sapien (65mm) homo sapien (69n0) sus scrofa P47896 macaca fasc (8n4f0 homo sapien P2687 oryctolagus (95pg59 tupaia glis (05704 rattus nory (86tel mus musculu Q8bu51 mus musculu |
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| Q9MAU5 Q8LAL8 Q9LTR5 CETP HUMAN Q6UM3 Q6ZME0 Q9NUL9 CETP_MACFA BPIL HUMAN CETP_RABIT Q9BG59 LPC4_RAT BPIL MOUSE |
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| 4888 14288 14288 4933 4588 4693 4493 4495 4495 |
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| 337.5 336.5 317 295 287 282 282 271.5 271.5 261.5 261.5 |
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ALIGNMENTS

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'Cloning of cDNA of human bactericidal/permeability-increasing
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                                                                                                                                                             KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG 120
                                                                                                                                                                                                                              240
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                                                                                 MEDILARGPCNAPRWASLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL
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                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A., AND SEQUENCE OF 28-64.
MEDLINE-89255455; PubMed=2722846;
Gray P.W., Flaggs G., Leong S.R., Gumina R.J., Weiss J., Ooi C.E.,
Elsbach P.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CAP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryora, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo. NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Cloning of the cDNA of a human neutrophil bactericidal protein. Structural and functional correlations."; J. Biol. Chem. 264:9505-9509(1989).
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P17213; Q9BYZ9; Q9H1L2; Q9H1M8; Q9H203; Q9UD65;
01-A04-1990 (Rel. 15, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
25-OCT-2004 (Rel. 45, Last annotation update)
Bactericidal permeability-increasing protein precursor (BPI)
                   Indels
                       ä
   2.2e-181;
Pred. No. 2.26
1, Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chem. 269:17411-17416(1994).
 .68;
                   485; Conservative
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   Similarity
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 Best Local
Matches 48
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BPI HUMAN
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Xu J., Wang H.;

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CITEMINATION: The representation of BPI is limited to many species of Gram-negative bacteria; this specificity may be explained by a strong affinity of the very basic N-terminal half for the negatively charged lipopolyaecharides that are unique to the negatively charged lipopolyaecharides that are unique to the cram-negative bacterial outer envelope.

CI SUBCELLULAR LOCATION: Membrane-associated in polymorphonuclear leukcoytes (PMN) granules.

CI DOMAIN: The N-terminal region may be exposed to the interior of the granule, whereas the C-terminal portion may be embedded in the membrane. During phagocytosis and degranulation, proteases may be released and activated and cleave BPI at the junction of the N-cleaninal portions of the molecule, providing controlled contents are release of the N-terminal antibacterial fragment when bacteria are
                                                                                                             MEDLINE=21638749; PubMed=11780052; DOI=10.1038/414865a;

MEDLINE=21638749; PubMed=11780052; DOI=10.1038/414865a;

MEDLINE=21638749; PubMed=11780052; DOI=10.1038/414865a;

MEDLINE=21638749; PubMed=11780052; DOI=10.1038/414865a;

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MEDLINE=21638749; PubMed=11780052; DOI=10.1038/414865a;

MEDLINGEN R., Barlow K.F., Batche K.W., Beard D.M., Barch D.M., Barlow K.F., Batche K.N., Beard E.M., Beard D.M., Barch M.B., Barch M.B., Barch M.B., Brown A.J., Bach D.V., Clamp M., Clark G., Clark L.N., Clark S.Y., Clae C.M., Collson A.C., Prankland G., Clark L.N., Clark S.Y., Clae C.M., Collson A.G., Frankland J.A., Fraser A., French L., Garner P., Grafham D.V., Griffiths C., Griffiths M.N.D., Gwilliam R., Hall R.E., Almanond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J., Huckle E., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D., Ray M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S., Lehvaeslaiho M.H., Leversha M.A., Lloyd C., Lloyd D.M., Lovell J.D., Marsh V.L., Mactin S.L., McConnachie L.J., McLay K., McMurray A.A., Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T., Oliver K., Sycamore N., Sycamore N., Sycamore N., Sycamore N., Sycamore N., Sycamore N., Sycamore N., Taylor R., Thomas D., Thomas D., Milley D.L., Thomas D., Milling D.L., Walliams L., Willing D.L., Williams E., Williams E., Willing D.L., Williams L., Willia
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MEDIATE=8033057; bubMed=3667613;
MEDIATE=8033057; bubMed=3667613;
OOI C.E., Weiss J., Elsbach P., Frangione B., Mannion B.;
"A 25-kDa NH2-terminal fragment carries all the antibacterial activities of the human neutrophil 60-kDa bactericidal/permeability-increasing proceain.";
J. Biol. Chem. 262:14891-14894(1987).
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MEDLINE=97334442; PubMed=9188532; DDI=10.1126/science.276.5320.1861;
MEDLINE=97334442; PubMed=9188532; DDI=10.1126/science.276.5320.1861;
MEDRINE=973442; PubMed=918052; DJ:
"Crygtal structure of human BPI and two bound phospholipids at 2.4-A
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MEDLINE-89315847, PubMed=2501794;
Gabay J.E., Scott R.W., Campanelli D., Griffith J., Wilde C.,
Marra M.N., Seeger M., Nathan C.F.,
"Antibiotic proteins of human polymorphonuclear leukocytes.";
Proc. Natl. Acad. Sci. U.S.A. 86:5610-5614 (1989).
Process. Submitted (NOV-2000) to the EMBL/GenBank/DDBJ databases.
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Nature 414:865-871(2001).
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245 ATTABTLDVQMKGEFYSENHHNPPPFAPPVMBFPAAHDRMVYLGLSDYFFNTAGLVYQEA
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P17453;
01-ANG-1990 (Rel. 15, Created)
01-ANG-1990 (Rel. 44, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Bactericidal permeability-increasing protein precursor (BPI).
                                                                                                                                                                                                                                                      Query Match
99.2%; Score 2486; DB 1; L
Best Local Similarity 100.0%; Pred. No. 2.5e-180;
Matches 483; Conservative 0; Mismatches 0;
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                                                                  EMBL; J04739; AAA51841.1; ALT_INIT.

EMBL; J04739; AAA51841.1; ALT_INIT.

EMBL; AL359555; CACC13043.1; -...

EMBL; AL499625; CACC1360.1; -...

EMBL; AL499625; CACC1360.1; -...

EMBL; AL499625; CACC14653.1; -...

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EMBL; AL49625; CACC1465.1; -...

EMBL; AL49636; CACC1465.1; -...

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EMBL; AL49636; CACC14665; CACC14666; CACC146666;  CACC1466666; CACC1466666; CACC146666666; CACC1466666; CACC1466666
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Cleavage sites for elastase (Potential)
Potential.
V -> A (in dbSNP:1341023).
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/FTIG='VAR 018401.
A -> V (in dbSNP:5743509).
/FTIG='VAR 018402.
K -> E (in dbSNP:4358188).
/FTIG='VAR 018403.
F -> S (in Ref. 3).
F -> L (in Ref. 2).
N -> D (in Ref. 3).
K -> R (in Ref. 3).
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                                                                                                                                                                                                                                                                                                                                                                             similarity).

DOMAIN: The N-terminal region may be exposed to the interior of the granula, whereas the C-terminal portion may be embedded in the membrane. During phagocytosis and degranulation, proteases may be released and activated and cleave BPI at the junction of the N-and C-terminal portions of the molecule, providing controlled release of the N-terminal antibacterial fragment when bacteria are
                                                                                                                                                                                                   increasing protein (BPI).";

Nucleic Acids Res. 18:3052-3052(1990).

-!- FUNCTION: The cytocoxic action of BPI is limited to many species of Gram-negative bacteria; this specificity may be explained by a setrong affinity of the very basic N-terminal half for the negatively charged lipopolysaccharides that are unique to the Gram-negative bacterial outer envelope.

-!- SUBCELLULAR LOCATION: Membrane-associated in polymorphonuclear Leukocytes (PMN) granules (By similarity).

-!- TISSUE SPECIFICITY: Restricted to cells of the myeloid series (By
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N-linked (GlCNAc. . ) (Potential)
N-linked (GlCNAc. . ) (Potential).
N-linked (GlCNAc. . ) (Potential).
N-linked (GlCNAc. . ) (Potential).
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                Bos taurus (Bovine).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Cetartiodactyla, Ruminantia, Pecora, Bovidae,
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                                                                                                                                   TISSUB=Bone marrow;
MEDLINE=90272418; PubMed=2349103;
Leong S.R., Camerato T.;
"Nucleotide sequence of the bovine bactericidal permeability
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Antibiotic; Glycoprotein; Membrane; Signal.
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HSSP; P17213; 1EWF.

InterPro; IPR001124; LBP_BPI_CETP.

Pfam; PP02186; LBP_BPI_CETP; 1.

SMART; SM00328; BPI_I, 1.

SMART; SM00329; BPII; 1.
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65 IPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKA 124

MARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISOKGLDYASOOGTAALOKELKRIK 64

1 MARGPDTARRWATLVVLAALGTAVT-TINPGIVARITQKGLDYACQQGVLTLQKELEKIT

요 ઠે 윰

59

Gaps

1;

94; Indels

81; Mismatches

Matches 306; Conservative

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                                                                                                                                                                                                                                                                                                              359
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                                                                                                                                                                 245 ATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLVYQEA 304
                                                                                                                                                                                                                                                              305 GVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQPTGL 364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                similarity).

DOMAIN: The N-terminal region may be exposed to the interior of DOMAIN: The Graminal portion may be embedded in the granule, whereas the C-terminal portion may be embedded in the membrane. During phagocytosis and degranulation, proteases may be released and activated and cleave BPI at the junction of the N-and C-terminal portions of the molecule, providing controlled and C-terminal portions of the molecule, providing controlled
                                                                                                                                                                                          Weiss J., Weinrauch T., Levy O., Flynn S.;
Submitted (JUN-1996) to the EMBL/GenBank/DDBJ databases.
-!-FUNCTION: The cytocoxic action of BPI is limited to many species of Gram-negative bacteria; this specificity may be explained by a serrong affinity of the very basic N-terminal half for the negatively charged lipopolysaccharides that are unique to the Gram-negative baccerial outer envelope (By similarity).
-!- SUBCELGULAR LOCATION: Membrane-associated in polymorphonuclear Leukocytes (PNN) granules (By similarity).
-!- TISSUE SPECIFICITY: Restricted to cells of the myeloid series (By
300 GALNLTLRDDMIPKESKFRLTTKFFGILIPQVAKMFPDMQMQLFIWASLPPKLTMKPSSL
                                                                   LIQLFHKKIESALRNKMNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGLVAPP
                                                                                                                 180 LIÓLFRKRIESLLOKSMTRKICEVVTSTVSSKLOPYFOTLÞVTTKLDKVAGVDYSLVAPP
                                                                                                                                                                                                                                                                                                                                                              365 TFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELKHSNI
                                                                                                                                                                                                                                                                                                                                                                                  425 GPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLFGADV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ingested (By similarity).
SIMILARITY: Belongs to the BPI/LBP/Plunc superfamily. BPI/LBP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Lagomorpha; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-1997 (Rel. 15, Created)
01-NOV-1997 (Rel. 15, Last sequence update)
05-UTL-2004 (Rel. 44, Last annotation update)
Bactericidal permeability-increasing protein (BPI) (Fragment)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRAIN=New Zealand white; TISSUE=Bone marrow;
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Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
An Latchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Batchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abrameon R.D., Mullahy S.J.,
Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
Nilalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Rahey J., Helton E., Ketteman M., Madan A.M., Rodriques S., Sanchez A.,
Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Galimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Jones S.J., Marra M.J.,
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Jones S.J., 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    425 GPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLFGADV 484
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MAWGPDNVRKWSSLALLAIVGTALTAATDPGFVARISOKGLDFVCOESMVELOKELLAIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            125 QKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           245 ATTAETLDVOMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLVYQEA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      56.5%; Score 1415.5; DB 2; Length 55.8%; Pred. No. 5.7e-99; ive 89; Mismatches 122; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Director MGC Project;
Submitted (AUG-2004) to the EMBL/GenBank/DDBJ databases.
EMBL, BC079318; AHF79318.1;
GO; GO:00008289; F:1ipid binding; IEA.
InterPro; IPR001124; LBP_BPI_CETP.
Pfam; PF01273; LBP_BPI_CETP.
Pfam; PF02886; LBP_BPI_CETP_C; 1.
SMART; SM00329; BPI2; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    53751 MW; 269591C4C2F5A6D1 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
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AC Q6
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             102 VPNVGLKFSISNANIKISGKWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTI 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCSSCSSHINSVHVHISKSKVGWLIQLFHKKIESALRNKWNSQVCEKVTNSVSSKLQPYF 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QTLPVMTKIDSVAGINYGLVAPPATTAETLDVQMKGEFYSENHHNPPPFRAPPVMEFPAAH 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360 KADKLVGELTLGRLILELKHSNIGSFPVQLLQALMDYVLSAVVLPKVNEKLQRGLPLFMP
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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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Potential.
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TISSUB=Testis;
PubMed=12477932; DOI=10.1073/pnas.242603899;
Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
Klausner R.D., Collins P.S., Wagner L., Shenmen C.M., Schuler G.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1;
                                                                                                                                                                                                                                                                                                                                                                                                            352 N-linked (GlcNAc. . .) (Potential)
48837 MW; 209AE0894FEDACFC CRC64;
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25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Bactericidal/permeability-increasing protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; Score 1507.5; DB 1; Pred. No. 5.2e-106; 80; Mismatches 83;
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Pfam; PF01273; LBP_BPI_CETP; 1.
Pfam; PF02886; LBP_BPI_CETP_C; 1.
SMART; SM00328; BPI; 1.
PROSITE; PS00400; LBP_BPI_CETP; PARTIAL.
Antibiotic; Glycoprotein; Transmembrane.
              send an email to license@isb-sib.ch)
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                                                                      EMBL; U61270; AAB03812.1; -. HSSP; P17213; 1BP1.
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Best Local Similarity 63.0
Matches 279; Conservative
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                                                                                                                                                                                                                                                            S MARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIK 64
                                                                                                                                                                                                                                        Gaps
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01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2003 (TrEMBLrel. 25, Last sanotation update)
Mus musculus adult male epididymis cDNA, RIKEN full-length enriched
library, clone:9230105K17 product:weakly similar to
bactericidal/permeability-increasing protein.
                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                        2;
                                                                                                                                                                                                                  54.3%; Score 1361; DB 2; Length 483; 54.1%; Pred. No. 8e-95; ive 90; Mismatches 129; Indels ;
                                                                                                   STRAIN-Swiss Webster;
Bingle C.D., Craven J.;
Submitted (AUG-2003) to the EMBL/GenBank/DDBJ databases.
EMBL, AY363993; AAR13289.1; -.
EMBL, AY363993; AAR13289.1; -.
EMBL, AY363993; AAR13289.1; -.
FinterPro; IRRONIL4; LBP BPI CETP.
Pfam; PF01273; LBP BPI CETP. 1.
Pfam; PF012886; LBP BPI CETP C; 1.
SMART; SM00329; BPI1; 1.
SMART; SM0329; BPI1; 1.
SEQUENCE 483 AA; 53940 MW; 4AA2D48095C52B74 CRC64;
25-OCT-2004 (TrEMBLrel. 28, Created)
25-OCT-2004 (TrEMBLrel. 28, Last sequence update)
25-OCT-2004 (TrEMBLrel. 28, Last annotation update)
Bactericidal/permeability-increasing protein.
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260; Conservative
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                                          Mus musculus (Mouse)
                                                                                          SEQUENCE FROM N.A.
                                                                      NCBI_TaxID=10090;
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Q8BSF3;
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Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P., Fukuda S., Furuno M., Hanagaki T., Hara A., Hashizume W., Fukuda S., Furuno M., Hanagaki T., Hara A., Hashizume W., Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Hirozane T., A. Hori F., Imotani K., Ishii Y., Itoh M., Kagawa T., Hasukawa T., Kodo S., Konno H., Kouda M., Koya S., Katoh H., Kawai J., Kondo S., Konno H., Kouda M., Koya S., Nurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M., Nishi K., Nomura K., Numazaki R., Ohno M., Ohato N., Okazaki Y., A. Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H., Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M., Tagawa A., Takahashi F., Takaku-Akahira S., Takeda Y., Tanaka T., Submitted (Julu-2001) to the EMBL/GenBank/DDBJ databases.

HSSP: P17213; 1BP1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the RIKEN Genome Transcripton Research Group Phase I & II Team; "Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length CDNAs.";
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                                                                                                                                                                  SEQUENCE FROM N.A.
STRAIN=CSTBL/66; TISSUE=Epididymis;
MEDLINE=99279253; PubMed=10349636; DOI=10.1016/S0076-6879(99)03004-9;
Carninci P., Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRAIN=CS7BL/61; TISSUB=Epididymis; MEDLINE=20530913; PubMed=11076861; DOI=10.1101/gr.152600; Shibata K., Itoh M., Alzawa K., Nagaoka S., Sasaki N., Carninci P., Shibata Y., Itoh M., Alzawa K., Nagaoka S., Sasaki N., Carninci P., Sun Akiyama J., Nishi K., Harama T., Tashiro H., Itoh M., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsuminco H., Sakaguchi S., Ikagimi T., Kashiwagi K., Fujiwake S., Inoue K., Togawa W., Izawa M., Ohara E., Watshiwagi K., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.; "RIKEN integrated sequence analysis (RISA) system-384-format Genome Res. 10:1757-1771(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=C57BL/6J; TISSUB=Epididymis; MEDLINE-20499374; PubMed=11042159; DOI=10.1101/gr.145100; MEDLINE-20499374; PubMed=11042159; DOI=10.1101/gr.145100; Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh Konno H., Okazaki Y., Muramateu M., Hayashizaki Y., Shibata Y., Muramateu M., Hayashizaki Y., Miramateu M., Hayashizaki Y., Miramateu M., Hayashizaki Y., Shibata K., Itoh Kormalization and subtraction of cap-trapper-selected cDNAs to Genome Res. 10:1617-1630(2000).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN=CS7BL/6J; TISSUE=Epididymis;
MEDLINE=21085660; PubMed=11217851; DOI=10.1038/35055500;
RIKEN FANTOM Consortium;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MGD; MGI:3045115; 9230105K17Rik.
GO; GO:0008289; F:lipid binding; IEA
InterPro; IPR001124; LBP BPI CETP.
Ffam; PF02286; LBP BPI CETP; 1.
Ffam; PF02886; LBP BPI CETP; 1.
SWART; SM00328; BPII; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
STRAIN-C57BL/6J; TISSUE-Epididymis;
The FANTOM Consortium,
                                                                                                                                                                                                                                                                                                                                                                                      Meth. Enzymol. 303:19-44(1999).
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MEDLINE-2138257; PubMed=12477932; DOI=10.1073/pnas.242603899;

A Straubberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

A Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Hopkins R.P., Jordan H., Moore T., Max S.I., Haich F.,

Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

A Hopkins R.P., Castes M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Stapleron M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

Brownstein M.J., Usdin T.B., Tooshiyuki S., Carninci P., Prange C.,

Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

A Richards S., Worley K.C., Hale S., Garcia A.M., Gabbs R.A.,

A Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
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                                                                                                                          64
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                                                                                                                                                    1 MTWAPDINVRKWSALLLLAIIGTALTAATDPGFVAMISQKGLDFACQQGVVELQAIS
                                                                                                                                                                                                                                GVLKMTLRDDMI PKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQPTGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5 MARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIK
                                                                                                                                                                                                                                                                                               QKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGW
                                                                                                                                                                                                                                                                                                                                                                              LIQLFHKKIESALRNKMNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGLVAPP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SFNPKLETQAFVVLPNASLVPLFVLGMVRRKTNASLEVDABENRLVGEMKLGSRMLLELK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HSNIGPPPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF
                                                                                     Gaps
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Amphibia, Batrachia, Anura, Mesobatrachia, Pipoidea, Pipidae,
                                                                                  .,
                                           Length
                                         53.8%; Score 1349.5; DB 2; Length
53.7%; Pred. No. 6e-94;
ive 90; Mismatches 129; Indels
54351 MW; 9D8F627EA5496D62 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
MGC84153 protein.
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                                                                                     Conservative
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NCBL_TaxID=8355;
    486 AA;
                                                               Similarity
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    SEQUENCE
                                           Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQPTG 363
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Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwood J., Schmutz J., Myers R.W., Butterfield Y.S., Krzywinski M.I., Skalaka U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length human and mouse CDNA sequences.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LTFYPAVDVQAFAVLPNSSLASLFLIGMITTGSMEVSAESNRLVGELKLDRLLLELKHSN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                     MEDIJNE=22341132; PubMed=12454917; DOI=10.1002/dvdy.10174;
Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W.,
Richardson P.;
                                                                                                                                                                                                                                                                                                                                                                    "Genetic and genomic tools for Xenopus research: The NIH Xenopus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              45.7%; Score 1145.5; DB 2; Length 476; 45.7%; Pred. No. 1.9e-78; ive 99; Mismatches 155; Indels 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Klein S., Gerhard D.S.;
Klein S., Gerhard D.S.;
Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
EMBL; BC04326; AAH74326.1; -
CO, GO:000229; F:lipid binding; IEA.
InterPro; IPR005503; Fili.
InterPro; IPR001539; Fili.
InterPro; IPR01124; LBP_BPI_CETP.
Pfam; PF01273; LBP_BPI_CETP; 1.
Pfam; PF01273; LBP_BPI_CETP_C; 1.
SMART; SM00329; BPIZ; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   476 AA; 52117 MW; 595F36DB5AB8B05D CRC64;
                                                                                                                                                                                    Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                       Dev. Dyn. 225:384-391(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity .....
Matches 221; Conservative
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SEQUENCE FROM N.A.

MEDLINE=21638749; PubMed=11780052; DOI=10.1038/414865a;

MEDLINE=21638749; PubMed=11780052; DOI=10.1038/414865a;

A Deloukas P., Matthews L.H., Ashurst J.L., Burton J., Gilbert J.G.R.,

A Deloukas P., Matthews L.H., Ashurst J.L., Burton J., Gilbert J.G.R.,

Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M.,

Buck D., Burrill W.D., Butler R.B., Carder N.P.,

Chappan J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,

Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,

Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,

Coulson A., Coville G.J., Deadman R., Dhami P.D., Dun M.,

Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,

Grafham D.V., Griffiths C., Griffiths M.N.D., Gwilliam R., Hall R.E.,

Hurnend S., Harley J.L., Heach P.D., Ho S., Holden J.L., Howden P.J.,

Hurnend S., Harley J.L., Heach P.D., Ho S., Holden J.L., Howden P.J.,

Kay M.P., Kimberley A.M., King A., Knighte A., Laird G.K., Lawlor S.,

Lehvaeslaiho M.H., Leversha M.A., Lloyd C., Lloyd D.M., Lovell J.D.,

Marsh V.L., Martin S.L., McConnachie L.J., McLay K., McKurray A.A.,

Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,

Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramsay H.,

Rice C.M., Ross M.T., Scott C.E., Sehrar H.K., Shownkeen R., Sims S.,

Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
MEDLINE=98110577; PubMed=9441745; DOI=10.1006/geno.1997.5030;
Kirschning C.J., Au-Young J., Lamping N., Reuter D., Pfeil D.,
Seilhamer J.J., Schumann R.R.;
"Similar organization of the lipopolygaccharide-binding protein (LBP) and phospholipid transfer protein (PLTP) genes suggests a common gene family of lipid-binding proteins.";
Genomics 46:416-425(1997).
                                                                                                                                                                                                                                                                                                                                                         MEDLINE=94292492; PubMed=7517398; Wilde C.G., Sellhamer J.J., McGrogan M., Ashton N., Snable J.L., Lane J.C., Leong S.R., Thornton M.B., Miller K.L., Scott R.W.; "Bactericidal/permeability-increasing protein and lipopolysaccharide (LPS)-binding protein. LPS binding properties and effects on LPS-mediated cell activation. J. Spindling properties and effects on LPS-J. Biol. Chem. 269:17411-17416 (1994).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Long J.Y., Liu J.Q., Xue Y.N., Wang H.X.; "Cloning and sequencing of human lipopolysaccharide-binding protein
                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                              MEDLINE=90385281; PubMed=2402637; Schumann R.R., Leong S.R., Flaggs G.W., Gray P.W., Wright S.D., Mathlaon J.C., Tobias P.S., Ulevitch R.J.; Structure and function of lipopolysaccharide binding protein."; Scructure 249:1429-1431(1990).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sheng Wu Hua Xue Yu Sheng Wu Wu Li Jin Zhan 25:469-471 (1998).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hubacek J.A., Aslanidis C., Schmitz G.;
Submitted (OCT-1996) to the EMBL/GenBank/DDBJ databases.
                                        LBP_HUMAN STANDARD; PRT; 481 AA. P18428; 043438; 092672; 091403; 09UD66; 01-NOV-1990 (Rel. 16, Created) 15-DEC-1998 (Rel. 37, Last sequence update) 05-JUL-2004 (Rel. 44, Last annotation update) Lipopolygaccharide-binding protein precursor (LBP)
                                                                                                                                                     Homo sapiens (Human)
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                                                                                                                                                                                                    NCBI_TaxID=9606;
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                                                                                                                                        Name=LBP;
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bloinformatics Institute. There are no restrictions on its by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ibe.sib.ch) Swann R.M., Sycamore N., Taylor R., Tee L., Thomas D.W., Thorpe A., Tracey A., Tromans A.C., Vaudin M., Wall M., Wallis J.M., Whitchead S.L., Whittaker P., Willey D.L., Williams L., Williams S.A. Wilming L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S. Rogers J., "The DNA sequence and comparative analysis of human chromosome 20."; MEDINE-99227852; PubMed-9568897; Beamer L.J., Carroll S.F., Eisenberg D.; "The BPI/LBP family of proteins: a structural analysis of conserved Sutton C.L., Smith R.I.F., Centola M.B., Theofan G.; Submitted (MAY-1995) to the EMBL/GenBank/DDBJ databases. GO; GO:0005615; C:extracellular space; TAS.
GO; GO:0006953; P:acute-phase response; TAS.
GO; GO:0006968; P:cellular defense response; TAS.
GO; GO:0009618; P:response to pathogenic bacteria; TAS.
InterPro; IPR001124; LBP_BPI_CETP. EMBL, AF013501, AAC39547.1; JOINED. EMBL, AF013502, AAC39547.1; JOINED. EMBL, AF013502, AAC39547.1; JOINED. EMBL, AF013503, AAC39547.1; JOINED. EMBL, AF013505, AAC39547.1; JOINED. EMBL, AF013505, AAC39547.1; JOINED. EMBL, AF013506, AAC39547.1; JOINED. EMBL, AF013509, AAC39547.1; JOINED. EMBL, AF013519, AAC39547.1; JOINED. EMBL, AF013519, AAC39547.1; JOINED. EMBL, AF013511, AAC39547.1; JOINED. EMBL, AF0105067; AAD21952.1; EMBL; M35533; AAA59493.1; -EMBL; X98657; CAA67226.1; -EMBL; X98659; CAA67226.1; JOINED.
EMBL; X98660; CAA67226.1; JOINED.
EMBL; X98661; CAA67226.1; JOINED.
EMBL; X98661; CAA67226.1; JOINED.
EMBL; X98662; CAA67226.1; JOINED.
EMBL; X98663; CAA67226.1; JOINED.
EMBL; X98664; CAA67226.1; JOINED.
EMBL; X98665; CAA67226.1; JOINED.
EMBL; X98666; CAA67226.1; JOINED.
EMBL; X98666; CAA67226.1; JOINED.
EMBL; X98666; CAA67226.1; JOINED.
EMBL; X98666; CAA67226.1; JOINED.
EMBL; X98666; CAA67226.1; JOINED.
EMBL; X98667; CAA67226.1; JOINED. JOINED. CAC10462.1; -. AF013512; AAC39547.1; L42172; AAA66446.1; -. SEQUENCE OF 1-41 FROM N.A. AAC39547.1 Nature 414:865-871(2001) Genew; HGNC:6517; LBP. MIM; 151990; -. 3D-STRUCTURE MODELING. PIR; A54136; A54136. HSSP; P17213; 1EWF. AL080249; family. regions."; EMBL; EMBL; EMBL; EMBL; EMBL; EMBL; EMBL;

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438 YIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNF 477
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Homo sapiens (Human)
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                        (Potential).
(Potential).
(Potential).
(Potential).
                        Pfam; PF02886; LBP_BPI_CETP_C; 1.
SMART; SM00328; BPI1; 1.
SMART; SM00329; BPI2; 1.
PROSTIE; PS00400; LBP BPI CETP; 1.
Antibiotic; Glycoprotein; Lipid transport; Signal; Transmembrane.
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44.8%; Pred. No. 4.4e-74;
tive 96; Mismatches 161; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                YIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLFGADVVY
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N-linked (GlCNAc. . .) (Poten
N-linked (GlCNAc. . .) (Poten
N-linked (GlCNAc. . .) (Poten
N-linked (GlCNAc. . .) (Poten
R -> H (in Ref. 2) .
E -> C (in Ref. 2) .
E -> F (in Ref. 2) .
N-S (in Ref. 4) .
VTAS -> GYCL (in Ref. 1) .
L -> S (in Ref. 1) .
L -> S (in Ref. 1) .
L -> S (in Ref. 1) .
L -> H (in Ref. 1) .
L -> H (in Ref. 4) .
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Last annotation update)
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                     CETP_C; 1.
  Pfam; PF01273; LBP_BPI_CETP; 1
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01-JUN-2002 (TrEMBLrel. 21,
01-JUN-2002 (TrEMBLrel. 21,
01-OCT-2003 (TrEMBLrel. 25,
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TISSUE=Liver;

X Strauberg N. S. Wagner L., Shenmen C.M., Schuler G.D.,

A Strauberg N.L., Feingold E.A., Grouse L.H., Derge J.G.,

A Strauberg N.L., Feingold E.A., Grouse L.H., Derge J.G.,

A Altachul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Altachul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Hopkins R.F., Jordan H., Moore T., Max S.L., Wang J., Haibe F.,

RA Hopkins R.F., Tordan H., Moore T., Max S.L., Wang J., Haibe F.,

RA Brownstein M.J., Usdin T.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,

RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Frange C.,

RA Brownstein M.J., McKernan K.J., Malek J.A., Gunaratne P.H.,

RA Richards S., Morley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

R. Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Glibs R.A.,

R. Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

R. Hatkesley R.W., Touchman J.W., Green E.D., Dickson M.C.,

R. Ricksley R.W., Touchman J.W., Green E.D., Dickson M.C.,

R. Ricksley R.W., Touchman J.W., Green E.D., Dickson M.C.,

R. Ajones S.J., Marra M.A.;

R. Jones S.J., Marra M.A.;

R. "Generation and initial analysis of more than 15,000 full-length human
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42.4%; Score 1062; DB 2; Length 4
Best Local Similarity 44.6%; Pred. No. 4.2e-72;
Matches 205; Conservative 94; Mismatches 159; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Strausberg R.; Strausberg R.; Submitted (PEB-2002) to the EMBL/GenBank/DDBJ databases. EMBL, BC022256; AAH22256.1; -- HSSP; P17213; IEWF.
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InterPro; IPR001124; LBP BPI CETP.
Pfam; PF01273; LBP BPI CETP.
SMART; SM0328; BPI1; I.
SMART; SM00328; BPI1; I.
SMART; SM00329; BPI2; I.
PROSITE; PRO$60400; LBP BPI CETP; 1.
SROATE; SM00400; LBP BPI CETP; 1.
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Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
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RA MEDLINE-22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Atlachul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Carnincd P., Brange C.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Carnincd P., Prange C.,
RA Stapleton M., Soares M.B., Boraldo M.F., Carnincd P., Prange C.,
RA Brownstein M.J., Usdin T.B., Toshiyuki S., Carnincd P., Prange C.,
RA Raba S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Raba S.S., McKernan R.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hales J., Garcia A.M., Gay L.J., Hulyk S.W.,
Richards S., Worley K.C., Hales J., Garcia A.M., Gay L.J., Hulyk S.W.,
Rhiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Rhiting M., Madan A., Young A.C., Schwuchenko Y., Bouffard G.G.,
Rhiting M., Rixiwinski M.I., Skalska W.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
Rodriguez A.C., Grimwood J., Schmutz J., Swailus D.E.,
R. Generation and initial analysis of more than 15,000 full-length human
                                                                                                            365 EGFVILPSSARESVFRLGVVTNVFVSLTFDNSKVTGMLHPEKAQVRLIESKVGMFNVNLF 424
GSFDLDVKSVTISVDLLLGVDP-SERPTVTASGCSNRIRDLELHVS-GNVGWLANLFHNQ 184
                                                                                                                                                                                   VOMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLVYQEAGVLKMTLR 312
                                                                                                                                                                                                                      245 VMFKGEIFNRNHRSPVTTPTPTMSLPEDSKQMVYFAISDQAFNIATRVYHQAGYLNFTIT 304
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                                                                              193 IESALRNKMNSQVCEKVTNSVSSKLOPYFOTLPVMTKIDSVAGINYGLVAPPATTAETLD
                                                                                                                                                                                                                                                                                          DDMI PKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQPTGLTFYPAVDV
                                                                                                                                                                                                                                                                                                                                                                                            373 QAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELKHSNIGPFPVELL
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MEDLINE=97289150; PubMed=9144073;
MEDLINE=97289150; DibMed=9164073;
Lengacher S., Jongeneel C.V., le Roy D., Lee J.D., Kravchenko V.,
Ulevitch R.J., Glauser M.P., Heumann D.;
"Reactivity of murine and human recombinant LPS-binding protein (LBP)
"Reactivity of murine and sacteria.";
J. Inflamm. 47:165-172(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus (Mouse).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QDIMNYIVPILVLPRVNEKLOKGFPLPTPARVQLYNVVLQPHQNFLLFGADVVY
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1D LBP MOUSE

AC 061805; 099KA0;

DT 01-NOV-1997 (Rel. 35, Created)

DT 01-NOV-1997 (Rel. 35, Last sequence update)

DT 05-JUL-2004 (Rel. 44, Last annotation update)

E Lipopolysaccharide-binding protein precursor (LBP).
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Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    J. Timunol. 153:743-752(1994).

-!- FUNCTION: Binds to the lipid a moiety of bacterial lipopolypaccharides (LPS), a glycollpid present in the outer membrane of all gram-negative bacteria. The LBP/LPS complex seems to interact with the CD14 receptor.

-!- SUBCELLULAR LOCATION: Secreted.
                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
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PIR; 156246, 156246.
HSSP: P17213: 1EMF.
RGD; 61865; Lbp.
InterPro; IPRO0123; LBP BPI CETP.
Pfam; PPO1273; LBP BPI CETP.
Pfam; PPO1233; LBP BPI CETP.
Pfam; PFO2886; LBP BPI CETP.
SWART; SM00328; BPI1; 1
SWART; SM00329; BPI2; 1.
PROSITE; PS00400; LBP BPI CETP; 1.
Antiblotic; Glycoprotein; Lipid transport; Signal; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIMILARITY: Belongs to the BPI/LBP/Plunc superfamily. BPI/LBP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481 Lipopolysaccharide-binding protein 300 N-linked (GlcNAc. ...) (Potential). 355 N-linked (GlcNAc. ...) (Potential) 53600 MW, 23867CB9CC97DZFC CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 481;
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     01-NOV-1997 (Rel. 35, Created)
1-NOV-1997 (Rel. 35, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
Lipopolysaccharide-binding protein precursor (LBP)
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                                                                                                                                                                STANDARD;
                                                                                                                                                                                                                                                                                                                                                 Rattus norvegicus (Rat)
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355 3
481 AA;
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197; Conserv
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                                        This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLVYQEAGVLKMTLR 312
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                                                                                                                                                                                                                                                                 Lipopolysaccharide-binding protein.
N-linked (GlcNAc. .) (Potential).
N-linked (GlcNAc. .) (Potential).
C -> G (in Ref. 2).
K -> G (in Ref. 2).
R -> S (in Ref. 2).
A -> S (in Ref. 2).
A -> S (in Ref. 2).
A -> F (in Ref. 2).
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C -> G (in Ref. 2).
C -> G (in Ref. 2).
C -> G (in Ref. 2).
SUBCELLULAR LOCATION: Secreted. SIMILARITY: Belongs to the BPI/LBP/Plunc superfamily. BPI/LBP family.
                                                                                                                                                                                                                                              transport; Signal; Transmembrane.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        5;
                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 41.1%; Score 1030; DB 1; Length 481; 11 Similarity 42.0%; Pred. No. 1.1e-69; Conservative 104; Mismatches 169; Indels ;
                                                                                                                                                                                                                                                                                                                                                                                                    -> M (in Ref. 2).
34EA9C066C9AB678 CRC64;
                                                                                                                        EMBL; X99347; CAAG7727.1; -.

EMBL; BC004795; AAH04795.1; -.

HSSP; P17213; 1EWF.

MG); MG1:1098776; 1Lbp.

GO; GO:001530; F:11popolysaccharide binding; 1DA.

InterPro; IRR001124; LBP BPI CETP.

Pfam; PF01273; LBP BPI CETP.

Ffam; PR0328; BPI1; I.

Ffam; PR0328; BPI1; I.

FAMRT; SM0328; BPI1; I.

PROSITE; PS00400; LBP BPI CETP.

Antibiotic; Glycoprotein; Lipid transport; Signal; Tr

SIGNAL
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481 AA;
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this tatement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@ib.ch).
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Antibiotic; Direct protein sequencing; Glycoprotein; Lipid transport;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tobias P.S., Soldau K., Ulevitch R.J.; "Isolation of a lipopolysaccharide-binding acute phase reactant from rabbit serum.";
                               478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J. EXP. Med. 164:777-793 (1986).

-!- FUNCTION: Binds to the lipid a moiety of bacterial lipopolysaccharides (LPS), a glycolipid present in the outer membrane of all Gram-negative bacteria. The LBP/LPS complex st to interact with the CD14 receptor.
-!- SUBCELLULAR LOCATION: Secreted.
-!- SIMILARITY: Belongs to the BPI/LBP/Plunc superfamily. BPI/LBP
                                                                                                                                                                                                                                                                                                                                                                                           Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Schumann R.R., Leong S.R., Flaggs G.W., Gray P.W., Wright S.D., Mathison J.C., Tobias P.S., Ulevitch R.J.; "Structure and function of lipopolysaccharide binding protein."; Science 249:1429-1431 (1990).
425 QAFLNYYLLNSLYPDVNAELAQGFPLPLPRHIQLHDLDFQIRKDFLYLGANVQY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lipopolysaccharide-binding protein N-linked (GIGNAc. .) (Potential) N-linked (GIGNAc. .) (Potential) N-linked (GIGNAc. .) (Potential)
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Matches 193; Conservative 103; Mismatches 171; Indels
                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eu
Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus
NCBI_TaxID=9986;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     628A6E0A647200C2 CRC64;
                                                                                                                                                                                                                                                                              05-JUL-2004 (Rel. 44, Last annotation update)
Lipopolysaccharide-binding protein precursor (LBP)
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                                                                                                                                                                                                                        (Rel. 15, Created)
(Rel. 16, Last sequence update)
(Rel. 44, Last annotation update)
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Pred. No. 2.7
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PIR; B35843; B35843.
HSSP; P17213; 1EWF.
InterPro; IPR001124; LBP BPI CETP.
Pfam; PP01273; LBP BPI CETP; 1.
SMART; SM00328; BPII; 1.
SMART; SM00329; BPII; 1.
                                                                                                                                                                     PRT;
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MEDLINE=90385281; PubMed=2402637;
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54001 MW;
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SIGNAL 1
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69 SDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQ-KR 127
                                                                                                                                                                                                   248 AETLDVQMKGEFYSENHHNPPFRAPPVMEFPAAHDRMVYLGLSDYFFNTAGLVYQEAGVL 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       353 ASGTVTAYAIQPNTTLSPLFVLNMEGSVSAQMNVTGVKLAGAITLNKIEMTLGTSYVGQF 412
                                                                                                                                                                                                                                                                                               LFHKKIESALRNKANSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGLVAPPATT 247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELKHSNIGPF 427
                                  SDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQK-R 127
                                                                                                                                                                FLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQ 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            68
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01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
LBP (LPS binding protein)/BPI (Bactericidal/permeability-increasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oncorhynchus mykiss (Rainbow trout) (Salmo gairdneri).
Eukaryots, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.

MEDLINE=22018144; PubMed=12023361;
Inagawa H., Honda T., Kohchi C., Nishizawa T., Yoshiura Y.,
Inagawa H., Honda T., Kohchi C., Suan G.;
Nakanishi T., Yokomizo Y., Soma G.;
"Cloning and characterization of the homolog of mammalian
lipopolysaccharide-binding protein and bactericidal permeability-
increasing protein in rainbow trout Oncorhynchus mykiss.";
J. Immunol. 168:5638-5644(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 473;
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GO; GO:0008289; F:ilpid binding; IEA
GO; GO:0008289; F:ilpid binding; IEA
InterPro; IPR001124; LBP BPI_CETP.
Pfam; PF02886; LBP_BPI_CETP.
SMART; SM00328; BPII, I.
SMART; SM00329; BPII; I.
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A Inagawa H., Honda T., Kohchi C., Nishizawa T., Yoshiura Y.,
Inagawa H., Honda T., Kohchi C., Nishizawa T., Yoshiura Y.,
A Nakanishi T., Yokomizo Y., Soma G.;
T. Coning and characterization of the homolog of mammalian
Ilipopolysaccharide-binding protein and bactericidal permeability-
Increasing protein in rainbow trout Oncorhynchus mykiss.";
J. Immunol. 168:568-564(2002).
R RSEP; P17213; IEWF.
R GO, GO:0008289; F:lipid binding; IEA.
R Increro; IPR001124; LBP BPI_CETP.
R Pfam; PF0286; LBP BPI_CETP.
R Pfam; PF0286; LBP BPI_CETP.
R SWART; SM00329; BPII; I.
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01-OCT-2002 (TrEMBLrel. 22, Last sequence update)
01-OCT-2003 (TrEMBLrel. 25, Last annotation update)
LBP (LPS binding protein)/BPI (Bactericidal/permeability-increasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLFGADVVYK 487
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Actinopterygii, Neopterygii, Teleostei, Euteleostei, Protacanthopterygii, Salmoniformes, Salmonidae, Oncorhynchus, NCBI_TaxID=8022;
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.larity 35.3%; Pred. No. 1.5e-57;
Conservative 121; Mismatches 178;
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Search completed: October 21, 2005, 11:30:48 Job time : 174.285 secs

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GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd. Copyright

 protein search, using sw model OM protein Run on:

October 21, 2005, 11:22:43 ; Search time 14.2593 Seconds (without alignments) 1241.566 Million cell updates/sec

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943 1 CNAPRWVSLMVLVAIGTAVT.......HVHISKSKVGMLIQLFHKKI 184 Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 Total number of hits satisfying chosen parameters:

283416 seqs, 96216763 residues

Searched:

seq length: 0 seq length: 2000000000 Minimum DB & Maximum DB &

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| Description | å bactericidal/perme | bactericidal/perme | bactericidal perme | lipopolysaccharide | . lipopolysaccharide | lipopolysaccharide | lipopolygaccharide | plasma phospholipi | phospholipid trans | cholesteryl ester | cholesteryl ester | cholesteryl ester | hypothetical prote | hypothetical prote | - | hypothetical prote | | | hypothetical prote | ated | probable DNA-direc | probable polygalac | hypothetical prote | | _ | hypothetical prote | irected | cell surface antig | |
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| SUMMARIES | A30909 | 843383 | S10180 | A54136 - | 156246 | A35843 | B35843 | 149370 | A53533 | A26941 | 146692 | A53176 | T22700 | T29190 | E87856 | T20710 | C86183 | T16889 | T20482 | D96907 | G72571 | D84871 | B99946 | S50627 | B84683 | T15438 | T38431 | C97702 | 27110 |
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ALIGNMENTS

(430909)
bactericidal/permeability-increasing protein precursor - human N;Alternate names: 55K bactericidal protein

C; Species: Homo sapiens (man)
C; Date: 18-Apr-1989 #sequence_revision 18-Apr-1989 #text-change 09-Jul-2004
C; Date: 18-Apr-1989 #sequence_revision 18-Apr-1989 #text-change 09-Jul-2004
C; Accession: A33850; B54136; A29464; A43600; A49716; A305000
C; Ascession: A33850; B54136; A29464; A43600; A49716; A30716; A

A;Accession: A33850

A; Modecule type: mRNA A; Residues: 1-487 < GRA> A; Cross-references: UNIPROT:Q9UCT4; GB:J04739; NID:g179528; PIDN:AAA51841.1; PID:g179529 R; Wilde, C.G.; Seilhamer, J.J.; McGrogan, M.; Ashton, N.; Snable, J.L.; Lane, J.C.; Leon J. Biol. Chem. 269; 17411-17416, 1994 A; Title: Bactericidal/permeability-increasing protein and lipopolysaccharide (LPS)-bindi A; Reference number: A54136; MUID:94292492; PMID:7517398

A; Status: nucleic acid sequence not shown; not compared with conceptual translation A; Molecule type: mRNA A; Residues: 1-374, 'L', 376-487 <WIL> A; Experimental source: HL-60 cells A; Note: sequence extracted from NCBI backbone (NCBIP:149855)

Accession: B54136

R;Ooi, C.E.; Weiss, J.; Blsbach, P.; Frangione, B.; Mannion, B. © J. Biol. Chem. 262, 14891-14894, 1987 A;Title: A 25-kDa amino-terminal fragment carries all the antibacterial activities of th A;Reference number: A29464; WUID:88033057; PMID:3667613

A; Accession: A29464

A; Molecule type: protein A; Residues: 32-51 <001> A; Residues: 32-51 <001> B; Wasiluk, K.R.; Skubitz, K.M.; Gray, B.H. F.; Masiluk, K.R.; Skubitz, R.M.; Gray, B.H. A; Infect. Immun. 59, 4133-4200, 1991 A; Title: Comparison of granule proteins from human polymorphonuclear leukocytes which ar A; Reference number: A43600; MUID:92040097; PMID:1937776

A; Accession: A43600

A;Molecule type: protein
A;Residues: 32-52, R' <WAS>
A;Residues: 32-52, R' <WAS>
A;Little, R.G.; Kelner, D.N.; Lim, E.; Burke, D.J.; Conlon, P.J.

\$\forall j.\title \text{Little}. Them. 269, 1865-1872, 1994
A;Title: Functional domains Of recombinant bactericidal/permeability increasing protein A;Reference number: A49716; MUID:94124531; PMID:8294435

A;Molecule type: protein
A;Residues: 32-130;132-141;143-165;202-215,'E',217-225 <LIT>
C;Comment: The bactericidal/permeability-increasing protein (BPI) is a 60 kD membrane-as C;Comment: The bactericidal/permeability-increasing protein (BPI) is a for lipopolysaccha which is specific for gram-negative bacteria. BPI has a high affinity for lipopolysaccha between BPI and an LPS-binding protein from liver and cholesteryl ester transfer protein

C, Genetics:

A, Gene: GDB: BPI

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Best Local Similarity 63.2%
Matches 115; Conservative
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Best Local Similarity
Matches 82; Conserv
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Dactericidal permeability-increasing protein precursor - bovine

C;Species: Bos primigenius taurus (cattle)

C;Date: 31-Dec-1990 #sequence_revision 31-Dec-1990 #text_change 09-Jul-2004

C;Accession: S10180

C;Accession: S10180

C;Accession: S10180

A;Leong, S.R.; Camerato, T.

Nucleic Acids Res, 18, 3052, 1990

A;Title: Nucleotide sequence of the bovine bactericidal permeability increasing protein
A;Reference number: S10180; MUID:90272418; PMID:2349103
A;Cross-references: GDB:131572; OMIM:109195
A;Map position: 20g11.23-20g12
C;Superfamily: lipopolysaccharide-binding protein
C;Superfamily: lipopolysaccharide-binding protein
C;Keywords: antibacterial; cytotoxin; glycoprotein; heparin binding; neutrophil
F;1-31/Domain: signal sequence #status predicted <SIG>F;1-31/Domain: signal sequence #status predicted <SIG>F;32-51/Region: bactericidal permeability-increasing protein #status predicted <ART>F;32-51/Region: bactericidal #status predicted
F;380/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dactericidal/permeability-increasing protein - synthetic

bactericidal/permeability-increasing protein - synthetic

c/species synthetic

A/Note: Home sapiens (man) gene engineered and expressed in Escherichia coli

c/species: 20-Oct-1994 #sequence_revision 15-Feb-1996 #text_change 15-Feb-1996

C/Accession: S43383

R/Oi, S.Y., Li, Y., O'Connor, C.D.

Biochem. J. 298, 711-718, 1994

A/Title: The region around residue 115 of human bactericidal/permeability-increasing pof a gene coding for the active domain and characterization of recombinant proteins.

A/Reference number: S43383
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKMSGNFDLSIEGMSISADLKLG 142
                                                                                                                                                                                                                                                                                                                                                                                    DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
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                                                                                                                                                                                                                                                                                                                                          69
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                                                                                                                                                                                                                                                                                                                          CNAPRWYSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
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                                                                                                                                                                                                          100.0%; Score 943; DB 2; Length 487;
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                                                                                                                                                                                                                                                    0; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKKI 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88.2%; Score 832; DB 4; I
100.0%; Pred. No. 5.4e-68;
ive 0; Mismatches 0;
                                                                                                                                                                                                                            Pred. No. 1e-77;
                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                               Best Local Similarity 100.0%; Matches 184; Conservative (
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Matches
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lipopolygaaccharide binding protein - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 26-Jul-1996 #sequence_revision 26-Jul-1996 #text_change 09-Jul-2004
C;Accession: 156246
R;Su, G.L.; Freeswick, P.D.; Geller, D.A.; Wang, Q.; Shapiro, R.A.; Wan, Y.H.; Billiar, <sup>1</sup>
                                                                                                                               protein #status predicted <MAT>
                                                              NID:g138; PIDN:CAA36797.1; PID:g139
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                                                                                                                                                                                                                                                                                                                                                       63 FKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKM 122
                                                                                                                                                                                                                                                                                                                                                                                                      126
                                                                                                                                                                                                                                                                                                                                                                                                                                                123 SGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHK 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     68
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                                                                                                                                                                                                                          1;
                                                                                                                                                                              Length 482;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ch 45.6%; Score 430; DB 2; Length 46 I Similarity 46.6%; Pred. No. 3.5e-31; 82; Conservative 38; Mismatches 54; Indels
                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Experimental source: liver
A; Note: sequence extracted from NCBI backbone (NCBIP:149401)
A,Accession: S10180
A,Molecule type: mRNA
A,Residues: 1-482 «LEGO»
A,Cross-references: UNIPROT:P17453; EMBL:X52563; NID:g1
C,Superfamily: lipopolysaccharide-binding procesin
F;1-26/Domain: signal sequence #status predicted <SIG>F;7-482/product: bactericidal permeability increasing
                                                                                                                                                                              DB 2;
                                                                                                                                                                           63.2%; Score 596.5; DB 2
63.2%; Pred. No. 2.8e-46;
ive 29; Mismatches 37
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C,Superfamily: lipopolysaccharide-binding protein
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Query Match
Best Local Similarity 28.8<sup>1</sup>
Matches 47; Conservative
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A35843
11popolysaccharide-binding protein - human
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Date: 05-Oct-1990 #sequence_revision 05-Oct-1990 #text_change 09-Jul-2004
C;Accession: A35843
R;Schumann, R.R; Leong, S.R.; Flaggs, G.W.; Gray, P.W.; Wright, S.D.; Mathison, J.C.; T
Science 249, 1429-1431, 1990
A;Tile: Structure and function of lipopolysaccharide binding protein.
A;Recession: A35843; MUID:90385281; PMID:2402637
A;Accession: A35843
A;Status: preliminary
A;Accession: A35843; MUID:90385281; PMID:2402637
A;Accession: A55843
A;Status: preliminary
A;Accession: A55843
A;Cross-references: UNIPROT:P18428; GB:M35533; NID:g186965; PIDN:AAA59493.1; PID:g186966
C;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
A;Genetics:
C;Genetics:
C;Genetics:
A;Genetics:
C;Genetics:
C;G
J. Immunol. 153, 743-752, 1994
A;Title: Molecular cloning, characterization, and tissue distribution of rat lipopolysac A;Title: Molecular cloning, characterization, and tissue distribution of rat lipopolysac A;Reference number: 156246; MUID: 94292804; PMID: 8021509
A;Accession: 156246
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Molecule type: mRNA
A;Residues: 1-481 cRES>
A;Cross-references: UNIPROT: Q63313; GB:L32132; NID: 9510714; PIDN: AAA21835.1; PID: 9510715
C;Superfamily: lipopolysaccharide-binding protein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 69 GKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKMSGNFDL 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9 LMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHL 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKMS
                                                                                                                                                                                                                                                                                                                                                                                                                                     4 PRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               129 SIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKKI 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
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                                                                                                                                                                                                                                                                                                               Length 481;
                                                                                                                                                                                                                                                                                                         . 45.4%; Score 428; DB 2; Length 48
44.2%; Pred. No. 5.4e-31;
ative 45; Mismatches 54; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 44.1%; Score 416; DB 2; Best Local Similarity 46.0%; Pred. No. 6.5e-30; Matches 81; Conservative 36; Mismatches 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               lipopolysaccharide-binding protein - rabbit C; Species: Oryctolagus cuniculus (domestic rabbit)
                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 44.2<sup>†</sup>
Matches 80; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              184 I 184
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C; Date: 05-Oct-1990 #sequence_revision 05-Oct-1990 #text_change 09-Jul-2004
C; Accession: B35843; A46553
R; Schumann, R.R.; Leong, S.R.; Flaggs, G.W.; Gray, P.W.; Wright, S.D.; Mathison, J.C.; T Science 249; 1429-1431, 1990
A; Title: Structure and function of lipopolysaccharide binding protein.
A; Reference number: A35843
A; Accession: B35843
A; Accession: B42 - CKTP
A; Cross-references: UNIPROT: P17454; GB: M35534; NID: g165467; PIDN: AA899235.1; PID: g165468
B; Tobias, P.S.; Soldau, K.; Ulevitch, R.J.
A; Exp. Med. 164, 777-793, 1986
A; Title: Isolation of a lipopolysaccharide-binding acute phase reactant from rabbit seru A; Reference number: A46553; MUID: 86306528; PMID: 2427635
A; Accession: A46553
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A,Residues: 1-493 ARBS-
A,Cross-references: UNIPROT:P55065, EMBL:U37226; NID:g1051265, PIDN:AAA80542.1, PID:g105
C,Superfamily: lipopolysaccharide-binding protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           plasma phospholipid transfer protein - mouse (5)pecies: Mus musculus (house mouse) (2)pecies: Mus musculus (house mouse) (2)pate: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004 (5)Accession: 149370 (5)Accession: 149370 (6)Accession: July Molfbauer, G.; Cheung, M.C.; Day, J.R.; Ching, A.F.; Lok, S.; Tu, A.Y. Rialbers, J.J.; Wolfbauer, G.; Cheung, M.C.; Day, J.R.; Ching, A.F.; Lok, S.; Tu, A.Y. A;Title: Functional expression of human and mouse plasma phospholipid transfer protein: A;Reference number: 149370; MUID:95383401; PMID:7654777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                66 KHLGKGHYSFYSMDIR--EFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKMS 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SS -YGAKGHPYYNISDVRVTQLHLISSELHFQPDQDLLLNISNASLGLHFRRQLLYWFLYDG 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFLKMSGNF 126
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      54
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLFHKKI 184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DLYVKGLIISVHLVLGSE-SSGRPTVTTSSCSSDIQNVELDI-EGDLEELLNLLQSQI 186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 VSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSFKIK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9 LMVLVAIGTAVTAAVN---PGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSFKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13;
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2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18.3%; Score 172.5; DB 2;
28.8%; Pred. No. 8.4e-08;
tive 40; Mismatches 63;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Score 357.5; DB 2
; Pred. No. 1.3e-24;
39; Mismatches 61
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Molecule type: protein
A;Residues: 27-53, XG', S8-62,' P',64-65 <TOB>
C;Superfamily: lipopolysaccharide-binding protein
C;Kowords: acute phase
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C.Species: Oryctolagus cuniculus (domestic rabbit)
C.Species: Oryctolagus cuniculus (domestic rabbit)
C.Space: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 09-Jul-2004
C.Accession: 146692
R.Magashima, M.; McLean, J.W.; Lawn, R.M.
J. Lipid Res. 29, 1643-1649, 1988
A,Title: Cloning and mRNA tissue distribution of rabbit cholesteryl ester transfer protes)
A,Reference number: 146692; MUID:89215620; PMID:3244015
A,Accession: 146692
A,Status: preliminary; translated from GB/EMBL/DDBJ
A,Molecule type: mRNA
A,Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cholesteryl ester transfer protein - crab-eating macaque
C;Species: Macaca fascicularis (crab-eating macaque)
C;Species: Macaca fascicularis (crab-eating macaque)
C;Abace: 12-May-1994 #sequence_revision 12-May-1994 #text_change 07-May-1999
C;Accession: A53176
R;Pape, M.E.; Rehberg, E.F.; Marotti, K.R.; Melchior, G.W.
Arterioscler. Thromb. 11, 1759-1771, 1991
A;Title: Molecular cloning, sequence, and expression of cynomolgus monkey cholesteryl est asma high density lipoprotein levels.
A;Reference number: A53176; MUID:92031355; PMID:1931878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Cross-references: UNIPROT:P22687; GB:M27486; NID:g530906; PIDN:AAA31199.1; PID:g530907
C;Genetics:
A;Gene: CETP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PSSQISMVPNVGLKFSISNANIKISGKWK---AQKRFLKMSGNFDLSIEGMSISADLKLG 142
                                               125 GIDQSIDFEIDS---AIDLQINTQLTCDSGRVRTDAPDCYLSFHKLLLHLQGEREPGWIK 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81 REFQLPSSQISMVPNVGLKFSISNANIKISG-----KWKAQKRFLKMSGNFDLSIEG 132
           121 KMSGNFDLSIEGMSISADLKLGSNPT--SGKPTITCSSCSSHINSVHVHI-SKSKVGWLI 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6 ASYEAGIVCRITKPALLVINQETAKVVQTAFQRAGYPDVSGERAVMLLGRVKYGLHNLQI 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27 GIVCRITKPALLVLNQETAKVIQSAFQRANYPNITGEKAMMLLGQVKYGLHNIQISHLSI 86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133 MSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKV------GWLIQLF 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 AAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHLGKGHYSFYSMDI
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13.7%; Score 129.5; DB 2;
Best Local Similarity 22.5%; Pred. No. 0.00068;
Matches 40; Conservative 35; Mismatches 70;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 12.8%; Score 120.5; DB 2; Best Local Similarity 22.4%; Pred. No. 0.0044; Matches 36; Conservative 36; Mismatches 80;
                                                                                                                                                                                                                                                                                                                                  cholesteryl ester transfer protein
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A;Molecule type: mRNA
A;Residues: 1-493 <PAP>
A;Cross-references: GB:M86343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Residues: 1-497 <NAG>
                                                                                                                               178 QLF 180
                                                                                                                                                                                       182 OLF 184
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A;Residues: 1-493 <DRA>
A;Cross-references: UNIPROT:P11597; EMBL:M30185; NID:g180259; PIDN:AAA51977.1; PID:g1802
                                                                                                                                                                                                                                                                                                                               A,Molecule type: mRNA
A,Residues: 1-493 <DNY>
A,Crose-references: UNIPROT:P55058; GB:L26232; NID:g468325; PIDN:AAA36443.1; PID:g468326
C,Genetics:
A,Gene: GDB:PLTP
A,Crose-references: GDB:340911; OMIM:172425
phospholipid transfer protein precursor - human
N.Alternate names: lipid transfer protein II; PLTP
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Accession: A53533
R;Day, J.R.; Albers, J.J.; Lofton-Day, C.E.; Gilbert, T.L.; Ching, A.F.T.; Grant, F.J.;
J. Biol. Chem. 269, 9388-9391, 1994
A;Title: Complete cDNA encoding human phospholipid transfer protein from human endotheli
A;Reference number: A53533; MUID:94179366; PMID:8132678
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Cholesteryl ester transfer protein precursor - human

Cholesteryl ester transfer protein precursor - human

Cholesters Homo sapiens (man)

Cjacesibor, A26941

Rjbrayna, D.; Jarnagin, A.S.; McLean, J.; Henzel, W.; Kohr, W.; Fielding, C.; Law Aftile: Cloning and sequencing of human cholesteryl ester transfer protein cDNA. A;Reference number: A26941; MUID:87258172; PMID:3600759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64 KIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWK---AQKRFL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20 PGCKIRVTSKALELVKQEGLRFLEQELETITIPDLRGK-----EGHFYYNISEVKVTE 72
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A;Map position: 16q13-16q13
F;1-17/Domain: signal sequence #status predicted <SIG>
F;18-493/Product: cholesteryl ester transfer protein #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25 PGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYSDSFKIKHLGKGH--YSFYSMDIRE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A,Map position: 20pter-20qter
C.Superfamily: lipopolysaccharide-binding protein
C;Keywords: glycoprotein; phosphoprotein
F;1-11/Domain: signal sequence #status predicted <SIG>
F;18-493/Product: phospholipid transfer protein #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17.9%; Score 169; DB 2; Length 493; 28.7%; Pred. No. 1.8e-07; ive 32; Mismatches 60; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNPTSGKPTITCSSCSSHINSVH 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | : | : : : | | : : : | RDP-AGRMKVSNVSCQASVSRMH 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 28.7% Matches 41; Conservative
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Best Local S:
Matches 40
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protein F10D11.6 [imported] - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 09-Jul-2004
C;Accession: B87856
C;Accession: B87856
R;anonymous, The C. elegans Sequencing Consortium.
Science 282, 2012-2018, 1998
A;Title: Genrome sequence of the nematode C. elegans: a platform for investigating biolog A;Reference number: A7500; MUID:99069613; PMID:9851916
A;Note: see websites genome wustl.edu/gsc/C_elegans/ and www sanger.ac.uk/Projects/C_elcA;Note: published errata appeared in Science 283, 15, 1999; Science 283, 2103, 1999; and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Cross-references: UNIPROT:017781; GB:chr_I; PIDN:CAB02917.1; PID:93875779; GSPDB:GN000
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                                             | :| |: :| | : | | : | | 64 ANLLADQLPRLILPDVEHILPSNQGIIXISKVHLSRFRR-AEHHQLNST----APN-KIS 117
                                                                                                                                                         FSISNANIKISGKWKAQKRF---LKMSGNFDLSIEGMS--ISADLKLGSNPTSGKPTITC 154
                                                                                                                                                                                                  118 WTMQNMDIGLLGDLSGSVNIVVPLNLTGQVEILAQGLTFHLESSIEKGKN---GSAKVTS 174
44 TAALQKELKRIKIPDYS----DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLK 99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141 LGSNPTSGKPTITCSSCSSHINSVHVHI 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      156 IERGPRG--PYVRLLSCDMQIGYADAYI 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Search completed: October 21, 2005, 11:31:49 Job time : 16.2593 secs
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Best Local Similarity
Matches 32; Conserv
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A;Status: preliminary
A;Molecule type: DNA
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hypochetical protein F55B12.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Species: Tacor-1999 #sequence_revision 15-Oct-1999 #text_change 09-Jul-2004
C;Accession: T22700
R;Sims, M.
submitted to the EMBL Data Library, September 1996
A;Reference number: 219602
A;Reference number: 219602
A;Reference proper DNA
A;Residues: 1-576 cWIL>
A;Molecule type: DNA
A;Residues: 1-576 cWIL>
A;Robidues: 1-576 cWIL>
A;Cross-references: UNIPROT:093796; EMBL:279757; PIDN:CAB02126.1; GSPDB:GN00023; CESP:F5
A;Experimental source: clone F55B12
C;Genetics:
A;Gene: CESP:F55B12.5
A;Map position: 5
A;Introns: 47/1; 178/3; 290/3; 353/2; 384/2; 427/3
C;Superfamily: Caenorhabditis elegans hypothetical protein F55B12.5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   71 KITKL------HISNVAKPNLSAKFIDGKGVAYNIŚLASFRAŚAYAEISVFVWSYE 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11 LVSIIQVGNSADSSEITHKPAGIYVRLNQKAVDYVADLASDALPAILNNLSPPDIVTDMA 70
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A;Map position: 4
A;Introns: 61/3; 99/2; 126/2; 161/3; 283/2; 359/2; 424/1; 463/3; 522/1; 570/1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 11.7%; Score 110; DB 2; Length 576; Best Local Similarity 22.9%; Pred. No. 0.048; Matches 38; Conservative 30; Mismatches 76; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      124 GNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHIS 169
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                                                     180
                                                                                                   143 SNPT--SGKPTITCSSCSSHINSVHVHI-SKSKVGWLIQLF
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us-10-629-516-2.rag

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October 21, 2005, 11:22:38; Search time 170.559 Seconds (without alignments) 1104.324 Million cell updates/sec
GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
                                                                                          - protein search, using sw model
                       Copyright
                                                                                          OM protein
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1 MRENMARGPCNAPRWVSLMV......NVVLQPHQNFLLFGADVVYK 487 US-10-629-516-2 2507 Title: Perfect score: Sequence:

2105692 segs, 386760381 residues BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table: Searched:

2105692 Total number of hits satisfying chosen parameters:

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0 Maximum DB seq length: 200000000

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geneseqp2000s:* geneseqp2001s:* geneseqp200ss:* geneseqp2003as:* geneseqp2003bs:* geneseqp2004s:* A_Geneseq_16Dec04:* geneseqp1980s:* geneseqp1990s:* •• Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STEMMENTES

| | Description | Aau06198 Human bac | Aar44420 pING4512 | Aar62370 Recombina | Aar57901 Bacterici | Aar62344 Recombina | Aar68923 Bacterici | Aar79185 Recombina | Aar79021 Bacterici | Aar81247 Recombina | Aar80995 Bacterici | | | | Aaw05852 Recombina | Aar97568 Human bac | Aaw17987 Bacterici | Aaw44650 Human bac | Aaw01702 Human bac | Aaw17986 Human bac | Aaw47090 Human bac | Aaw40141 Human rec | Aaw61158 Recombina | Aaw56156 A bacteri | Aaw26776 Human bac | Aaw63306 Recombina |
|-----------|--------------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----------|----------|----------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| SUMMARIES | ID | AAU06198 | AAR44420 | AAR62370 | AAR57901 | AAR62344 | AAR68923 | AAR79185 | AAR79021 | AAR81247 | AAR80995 | AAR67998 | AAR86455 | AAR76243 | AAW05852 | AAR97568 | AAW17987 | AAW44650 | AAW01702 | AAW17986 | AAW47090 | AAW40141 | AAW61158 | AAW56156 | AAW26776 | AAW63306 |
| | ngth DB | 487 1 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 | 487 2 |
| die | Query Match Length DB | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| | Score | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 | 2507 |
| | Result No. | 1 | 7 | ٣ | 4 | ß | 9 | 7 | 60 | ი | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |

Example 5; Fig 5A-D; 20pp; English.

| ###################################### | Aays/625 Human Bri Aae01016 Recombina |
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| AAW63304 AAW41359 AAW94284 AAY1664 AAY31621 AAX26930 AAX98885 AAX98885 AAX98885 AAX98885 AAX98382 AAX98339 AAB16109 AAB16109 AAB16109 AAB16109 AAB1751 AAB1751 AAB11117 | AAE01016 |
| 44444444444444444444444444444444444444 | 487 4 |
| 25507 100.0 25507 100.0 | |
| | 44 45 25 |
| | |

ALIGNMENTS

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Human; bactericidal permeability-increasing protein; BPI; PMN; polymorphonuclear leukocyte; Gram-negative bacteria; bacteraemia; sepsis; bacterial infection; skin infection, decubitus ulcer; burn; vulnerary; antimicrobial; antibacterial, immunosuppressive; protein therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bactericidal-permeability increasing holoprotein fragments - used for treatment of diseases caused by gram-negative bacteria such as bacteraemia or sepsis.
                                                                                                                                                                                                                                                            Human bactericidal/permeability-increasing (BPI) protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .31
/label= Signal_peptide
32. .487
/label= Mature_BPI_protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                AAU06198 standard; protein; 487 AA
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88US-00228035.
91US-00762730.
91US-00005031.
93US-00007837.
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                                                                                                                                                                                                  (first entry)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1989-068849/09.
N-PSDB; AAS13679.
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05-AUG-1988;
17-SEP-1991;
11-DEC-1991;
22-JAN-1993;
23-JAN-1995;
                                                                                                                                                                                               16-JAN-2002
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                                                                                                                                 AAU06198;
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RESULT 1
AAU06198
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heavy;

Polymerase chain reaction; primer; amplify; PCR; plasmid; pING4512; pING4503; bactericidal/permeability-increasing protein; BPI; 1gG; heachain; pME37; fusion protein; Gram negative; renal failure; bacterial infection; endoroxin related shock; metabolic acidosis; disseminated intravascular coagulation; anemia; thrombocytopenia; leukopenia; adult respiratory distress syndrome; hypotension; fever; constant region; lipopolysaccharide complement binding; placental transfer; PC receptor binding.

pING4512 encoded fusion protein.

/note= "Mature rBPI(191)-IgG fusion protein"

.31
 /note= "Signal peptide"

.487

WO9323434-A2

Location/Qualifiers

Synthetic

Peptide Protein

```
The present invention relates to the isolation of human

bactericidal/permeability-increasing (BPI) protein from polymorphonuclear

leukocytes (PMN). BPI can be produced by growing in a culture medium,

host cells transformed or transfected to express BPI encoded by

chost cells transformed or transfected to express BPI encoded by

complementary strand, or a human BPI DNA sequence that hybridises under

stringent hybridisation conditions with the BPI polymucleotide sequence

or its complementary strand. BPIs are useful against a wide range of Gram-

negative bacteria, particularly for the treatment of diseases caused by

cram-negative bacteria such as bacteraemia or sepsis, infections caused

by Escherichia coli, Salmonella, Klebsiella or Pseudomonas, and skin

infections which occur in bedridden patients suffering from decubitus

cram-negative bacteria and national accessor also be used as a model

for the design of new antibiotic agents, to provide sequence information

on BPI to direct the design of future generations of antimicrobial agents

pecific for Gram-negative bacteria, and to be used as probes in

molecular biological techniques. The BPI protein sequence is also useful

in protein therapy. The present sequence represents the human BPI protein

cof the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VAPPATTAETLDVQMKGEFYSENHHNPPPFAAPPWEFPAAHDRMVYLGLSDYFFNTAGLV 300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      YQEAGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YQEAGVLKMTLRDDMI PKESKFRLTTKFFGTFLPEVAKKFPNWKIQIHVSASTPPHLSVQ 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KVGWLIQLFHKKI ESALRNKMNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL
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Best Local Similarity 100.
Matches 487; Conservative
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This sequence is encoded by the plasmid pING4512. pING4512 was

constructed using the primer sequence given in AAG52480. Plasmid pINC4503

was cut with Alwal. the ends made blunt with 74 DNA pOlymerase, and the
DNA then cut with Sall. The resultant approx. 700bp Sall/blunt fragment
Contains the 30 bp 5' untranslated region and the DNA encoding the signal
mains acids of bactericidal/permeability-increasing
protein (BPI). 1gG heavy chain (HC) sequences, which also included the
hinge region of the IgG HC were PCR amplified from plasmid pMB27 using
these primers. Plasmids such as pING4512 may be used to produce fusion
conditions and their sequelae including endotoxin related shock and
conditions associated with it, such as disseminated intravascular
conditions anemia, thrombocytopenia, leukoppenia, adult respiratory
distress syndrome, renal fallure, hypotension, fever and metabolic
acidosis. Proving BPI or a fragment of it, as part of the fusion with an
immunoglobulin heavy chain constant region provides the potential
cacharide complement binding, bivalent binding to lipopolycacharide complement binding and increasing placental transfer. (Updated
on 25-MAR-2003 to correct PN field.) KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG 120 KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG 120 1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL 60 1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISOKGLDYASQOGTAALQKEL Gaps , 0 Length 487; Indels 7; DB 2; 4.3e-229; 100.0%; Score 2507; 100.0%; Pred. No. 4.3 ive 0; Mismatches Claim 20; Page 48-50; 75pp; English. Query Match 100. Best Local Similarity 100. Matches 487; Conservative Sequence 487 AA; 61 셤 a 8 ò

480

GADVVYK 487 GADVVYK 487 AAR44420 standard; protein; 487 AA

RESULT 2

(revised) (first entry)

25-MAR-2003 03-JUN-1994 AAR44420;

AAR44420 ID AAR4 XX AC AAR4 XX DT 25-N DT 03-5

PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK 420

301 361 361 421 421 481 481

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New fusion proteins for treating bacterial infections - comprising a bactericidal-permeability-increasing protein and a immunoglobulin heavy chain constant domain.

Horwitz A;

Grinna LS,

Theofan G,

(XOMA) XOMA CORP.

WPI; 1993-386485/48. N-PSDB; AAQ52488.

93WO-US004754. 92US-00885911

19-MAY-1993; 19-MAY-1992;

25-NOV-1993

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GADVVYK
11-MAR-1994;
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                                                                                                                                                                                                                                  YQEAGVLKMTLRDDMI PKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ
                                                                                                                                                                                                                                                                                                  HSNIGPFPVELLQDIMYIVPILVLPRVNEKLQKGFPLPTPARVQLXNVVLQPHQNFLLF
                                  KWKAQKRFLKMSGNPDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS
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                                                                               KVGWLIQLFHKKIESALRNKWNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL
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/note= "LAL inhibiting domain"
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ce= "Heparin binding site"
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/note= "7
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/note= "He
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This sequence represents the N-terminal of recombinant bactericidal/permeability (rBPI) protein. This expression product encoding the 31 residue signal protein and the first 199 amino acids of the N-terminal of mature human BPI has a molecular weight of 23 kD and is designated rBPI-3. In binding assays rBPI-23 was shown to have three separate functional domains with heparin-binding activity, at least three major domains with significant Limulus amoebocyte lysate (LAL) inhibition and one region with bactericidal activity. BPI, or active fragments of it may be used to treat and prevent the effects of chronic inflammatory disease states such as arthritis, psoriasis, inflammatory bowel disease, crohn's disease and asthma. (Updated on 25-MAR-2003 to correct PN field.) (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG 120
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                                                                                                                                                                                                                                                                                                         Uses of bactericidal permeability increasing protein product - to neutralise anticoagulant effect of heparin, to inhibit angiogensis cell proliferation, as contraceptive and to reduce inflammation.
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100.0%; Pred. No. 4.3e-229;
ive 0; Mismatches 0;
                                                                                                                                                                                 Parent JB;
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                                                                                                                                                                                 Gazzanosantoro H,
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Best Local Similarity 100.0%;
Matches 487; Conservative (
94WO-US002401
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93US-00093202
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Treating Mycobacterium infections with bactericidal-permeability inducing peptide - also used for in vivo and in vitro neutralisation of
               YQEAGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360
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                                                                                                                                 361 PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BPI; bactericidal/permeability-increasing protein; rBPI23; therapy; treatment; infection; Mycobacteria; leprosy; tuberculosis; LAM; lipoarabinomannan; improved pulmonary clearance; gram negative;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   32. 487 ____/label= N-terminus_ of_human_BPI_holoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                              Recombinant 23 kD human BPI N-terminal protein.
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/label=_signal_sequence
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mycobacterial lipoarabinomannan
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bactericidal-permeability-increasing protein analogues with Cys132 or Cys135 replaced - also fusion proteins and C-terminally truncated forms, have increased stability and are useful to treat gram-negative bacterial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BPI are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KVGWLIQLFHKKIESALRNKANSQVCEKVTNSVSSKLQPYFQTLPVATKIDSVAGINYGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Analogs, fusion proteins and C-terminal truncated forms of human claimed that show improved resistance to dimerization and adduct formation. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                        BPI; bactericidal-permeability-increasing protein; bactericide;
fusion protein; Gram-negative bacterium; infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 487;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Grinna L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Score 2507; DB 2;
100.0%; Pred. No. 4.3e-229;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Baltaian M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 52-54; 77pp; English.
                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                1. .31
/label= Sig_peptide
                                                   AARS7901 standard; protein; 487 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Burke D,
                                                                                                                                                                                                                                                                                                                                                                                                                                    94WO-US001235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93US-00013801
                                                                                                                      (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           487; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Theofan G, Horwitz A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1994-279744/34.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (XOMA ) XOMA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N-PSDB; AAQ67270.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 487 AA;
                                                                                                                                                                          Bactericide BPI
                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                  02-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-FEB-1993;
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                                                                                                                      25-MAR-2003
29-MAR-1995
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                                                                                   AAR57901;
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Best Local
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VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 300
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                                                                                                   binding protein deriv. and hybrid protein binds to lipo:polysaccharide lacks CD14-mediated immuno:stimulatory properties, used to treat Gramnegative bacterial infections and associated conditions.
                                                                                                                                                                                                       increasing protein (rBPI). The protein contains the lipopolysaccharide (LPS) binding domain fragments described in ARA68919-R68921. The fragments are used in the construction. of hybrid proteins for the treatment gram-negative bacterial infections and associated conditions. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421 HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLFTPARVQLYNVVLQPHQNFLLF
                                                                                                                                                                                                                                                                                                                                                                                                          KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KVGWLIQLFHKKIESALRNKANSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          YQEAGVLKMTLRDDMI PKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ
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                                                                                                                                                                                                                                                                                                                                                                                          1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL
                                                                                                                                                                                            encodes AAR68923 recombinant bactericidal/permiability.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Recombinant bactericidal/permeability-increasing protein rBPI.
                                                                                                                                                                                                                                                                                                                                  Length
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                                                                                                                                                                                                                                                                                                                                100.0%; Score 2507; DB 2;
100.0%; Pred. No. 4.3e-229;
ive 0; Mismatches 0;
                             PW.
                             Trown
                                                                                                                                                                 Example 2; Page 70-72; 114pp; English
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(first entry)
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N-PSDB; AAQ80827.
                                                                                                                                                                                                                                                                                                                                                Similarity
                             Gazzano-Santoro H,
(XOMA ) XOMA CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GADVVYK
                                                                                                                                                                                                                                                                                                     Sequence 487 AA;
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21-DEC-1995
                                                                                                                                                                                                                                                                                                                                                             Matches 487;
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Best Local
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                                                                                                                                                                                    KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG 120
                                                                                                                                                                                                                                                         180
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                                                                                                                                                                                                                                                                                                                                                                   PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK 420
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                                                                                                                                                                                                                            KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS 180
                                                                                                                                  9
                                                                                                                         MRENMARGPCNA PRWYSLMYLVA I GTA VTAAVNPGVVVR I SOKGLDYASQOGTAALOKEL
                                                                                                                                                                                                                                           1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISOKGLDYASOOGTAALOKEL
                                                                                                                                                                                                                                                                                    KVGWLIQLFHKKI ESALRNKMNSQVCEKVTNSVSSKLQPYFQTLPVMTKI DSVAGINYGL
                                                                                                                                                                                                                                                                                                                                                  VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV
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                                                                           Gaps
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                                             487;
                                            Length
                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bactericidal/permeability-increasing protein (rBPI)
                                            Score 2507; DB 2;
Pred. No. 4.3e-229;
                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lipopolysaccharide binding protein; rLPB; LPS; gram-negative bacterial infections; treatment; bactericidal/permeability-increasing protein.
                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
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/label= sig_peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAR68923 standard; protein; 487 AA.
                                            100.0%;
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                                                             Local Similarity 100.
nes 487; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GADVVYK 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 487
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-MAR-2003
11-SEP-1995
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301 YQEAGVLKATLRDDMIPKESKFRLTTKFFGTPLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360
                                                                                                            241 VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEPPAAHDRMVYLGLSDYFFNTAGLV 300
                                                                                                                                                                                                                                                                                361 PIGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Recombinant endotoxin-binding protein comprising bactericidal/permeability increasing protein (BPIP) or its endotoxin N-terminal fragment, can be produced by growing genetically transformed host cells in a suitable medium so that BPIP is secreted into the medium. The BPIP is then isolated and can be used to control bacterial infections. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Recovery of recombinant endotoxin binding protein - by culturing transformed cells in medium contg. cation exchange material, useful for treatment of bacterial infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bactericidal permeability increasing protein; BPIP; infection; control; recombinant.
                                                                                                                                                                                                                                                                                                                                                                       421 HSNIGPFPVELLQDIMMYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF
                                                                                                                                                               YQEAGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ
                                                                                                                                                                                                                                                      PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK
                                                                                                                                                                                                                                                                                                                                             HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bactericidal/permeability increasing protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Col 13-16; 18pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                       481 GADVVYK 487
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2003
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from the granules of mammalian polymorphonuclear neutrophils. The mol.

wt. of the entire human BPI protein is approx. 55,000 daltons. The AA

equence of the entire human BPI protein, as well as the DNA encoding the

protein, have been elucidated in Figure 1 of Gray et al., J. Biol. Chem.

264:9505 (1989) and are incorporated by reference. In Gazzano-Santoro et

al., Infect. Immun. 60:473-4761 (1992) an expression vector was used as

seconding a recombinant expression vector was used as

the 31- residue signal sequence and the first 199 AAs of the N-terminus

of the mature human BPI, as set out in Figure 1 of Gray et al., except

that Val151 is specified by GTG ratether than GTC, and residue 185 is Glu

(specified by GAG) rather than Lys (specified by AAG). Recombinant

coloprotein (rBPI) has also been produced having the sequence

conced for rBP123 and the the exception that residue 417 is Ala (specified

by GCT) rather than Val (specified by GTT). In the spec., the BPI protein

product is used for the treatment of humans exposed to bacterial
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              endotoxin in circulation. BPI protein products are administered in dosagants. of 0.1-10 mg/kg body wt. by parenteral routes. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MRENMARGPCNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISOKGLDYASQOGTAALOKEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treatment of humans exposed to bacterial endotoxin in circulation - bactericidal/permeability-increasing protein product to alleviate increase in circulating tumour necrosis factor and interleukin 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Van Deventer SJH, Von Der Mohlen MAM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
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100.0%; Score 2507; DB 2; Length 487;
Best Local Similarity 100.0%; Pred. No. 4.3e-229;
Matches 487; Conservative 0; Mismatches 0; Indels 0
                       Bactericidal/permeability-increasing protein; BPI; endotoxin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 43-45; 68pp; English
                                                                                                                                          Location/Qualifiers
                                                                                                                                                                      1. .31
/label= signal
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94US-00291112
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                                                   Gram negative bacteria.
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                                                                                                  Homo sapiens
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16-AUG-1994;
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                                                                                                                                                                                                                                                                                                                                                                                         Bactericidal/permeability increasing protein; BPI; granule; mammalian; polymorphonuclear neutrophil; anti-bacterial; fungus; infection; 88; antifungal; fluconazole; amphotericin B; Candida albicans; sterilise; lipopolysaccharide binding protein; sterilisation; medical instrument.
       MRENMARGPCNAPRWYSLMYLYAIGTAVTAAVNPGYVVRISQKGLDYASQQGTAALQKEL
                                                                                                                                                                                                                                    KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG
                                                                               KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS
                                                                                                              YQEAGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ
                                                                                                                                                                            VQEAGVLKATLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ
                                                                                                                                                                                                      PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK
                                                                                                                                                                                                               PIGLIFYPAVDVQAFAVLPNSSLASLFLIGWHTTGSMEVSAESNRLVGELKLDRLLLELK
                                      KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG
                                                                      KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS
                                                                                                       KVGWLIQLFHKKIESALRNKMNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL
                                                                                                                                     VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV
                                                                                                                                                                                                                                                                                                                                                                           Recombinant bactericidal/permeability increasing holoprotein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .31
/note= "signal peptide"
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                                                                                                                                                                                                                                                                                                                             AAR81247 standard; protein; 487
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94US-00209762.
94US-00273540.
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11-MAR-1994;
11-JUL-1994;
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The amino acid sequence of a recombinant bactericidal/permeability increasing (BPI) protein. BPI protein can be isolated from the granules of mammalian polyworphonuclear neutrophils (PMN). The protein has antibacterial activity associated with 3 functional domains: I (AAR81085), II (AAR81086) and III (AAR81087) present in N-terminal region of the BPI holoprotein (AAR81245). The antibacterial regions were used to design the antifungal peptides AAR81083-4, AAR81088-R81244 and AAR81248-R81308. The peptides are used to treat fungal infections together with other antifungal cpds e.g. fluconazole or amphotericin B. The antifungal activity of the peptides may also be enhanced by addition of a nipopolysaccharide binding protein (LBP) e.g. AAR81246. The peptides can be used to treat fungal infection, esp. Candida albicans. They are also useful for killing or inhibiting fungi in vitro e.g. for sterilising
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241 VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEPPAAHDRMVYLGLSDYFFNTAGLV
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                            Treating fungal infection with bactericidal permeability increasing protein or deriv. - esp. for control of systemic Candida albicans infection or for use in in vitro sterilisation.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 487;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Score 2507; DB 2;
100.0%; Pred. No. 4.3e-229;
iive 0; Mismatches 0;
  Lambert
                                                                                                                                                                                                                                       Example 1; Page 105-107; 153pp; English
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AAR80995
ID AAR80995 standard; protein; 487 AA.
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Scannon PJ,
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                                                    WPI; 1995-263713/34
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                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gram-negative bacterial infections are treated by co-administration of BPI protein and LBP. Recombinant BPI 50 kDa holoprotein rBPI50 (given in AAR67998) is the preferred BPI. (Updated on 25-MAR-2003 to correct PN
                 VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV
                                                                                                                                    PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK
                                                                                                                                                                                                      HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          - comprises
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bactericidal/permeability-increasing protein; BPI; rBPI; rBPI50; lipopolyeaccharide binding protein; LBP; rLBP25; rLBP; Gram-negative bacterium; infection; antiseptic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          prod. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Method for treating gram negative bacterial infection - administering lipopolysaccharide binding protein (LBP) pactericidal/permeability-increasing (BPI) protein prod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           32. .487
/label= Mat_peptide
/note= "rBPI50 holoprotein"
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/label= Sig_peptide
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94US-00274303
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New peptide(s) based on bactericidal/permeability-increasing protein -
having heparin binding and neutralisation, LPS binding and neutralisation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Recombinant bactericidal/permeability increasing protein (rBPI) is encoded by AAT0951. BT (bactericidal permeability-increasing) peptides (AAR80996-81081 and AAR8253-372) each have an amino acid sequence that is dariv. of a BPT functional domain (or a variant) having at least one of the biological activities of BPI, such as heparin binding or neutralisation, lippoplysaccharide (LPS) binding or neutralisation or bactericidal activity. The BPI peptides are based on the amino-terminal portion of BPI, esp. functional domains I, II, and III (BPI residues 17-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MRENWARGPCNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL 60
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                                                                                                  bactericidal/permeability increasing peptide; BPI; heparin; binding; neutralisation; lipopolysaccharide; LPS; bactericidal activity; treatment; neutralise endotoxin; inhibit angiogenesis; inhibit tumour formation; proliferation.
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                                                                     Bactericidal/permeability increasing protein (rBPI).
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                                                                                                                                                                                                                            1. .31
/label= Signal_peptide
32. .487
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/label= mature_peptide
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94US-00209762
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N-PSDB; AAT00951.
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                                                                                                                   KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS
                                                                                                                                                    VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV
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                                        MENMARGECNAPRWYSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL
                                                    KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG
                                                                                                          KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS
                                                                                                                                           KVGWLIQLFHKKIESALRNKMNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL
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                        Gaps
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        Length 487;
                       Indels
      Match 100.0%; Score 2507; DB 2; Local Similarity 100.0%; Pred. No. 4.3e-229; les 487; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                            rBPI for use in treating liver damage.
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32. .487
/label= rBPI
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                                            Use of bactericidal/permeability-increasing protein prods. - for treating adverse physiological effects of a depressed reticuloendothelial system
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                                                                                                                                                                                  The patent relates to the new use of a BPI protein product for treating adverse effects associated with depressed reticuloendothelial system function, especially diminished function of Kupfer cells of the liver resulting from physical, chemical or biological insult. Physical insult is exemplified by partial or total hepatectomy such as accompanies transplantation, and trauma. Chemical insult is exemplified by the results of exposure to hepatotoxic substances such as chloroform, glucosamine, carbon terrachloride and echanol. Biological insult is exemplified by (non-)infectious diseases such as viral hepatitis and chronic inflammatory hepatitis. The BPI protein product is preferably FBPI-21, FBPI, FBPI-42 dimer or one of 222 specified BPI peptides. The present sequence is that of FBPI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KVGWLIQLFHKKIESALRNKMNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 2507; DB 2;
100.0%; Pred. No. 4.3e-229;
tive 0; Mismatches 0;
                                                                                                                                                Claim 6, 13; Page 42, 43; 136pp; English
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Matches 487; Conservative
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WPI; 1995-161572/21
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This is the amino acid sequence of a bactericidal/permeability increasing (BPI) protein. BPI is a protein isolated from the granules of mammalian polymorphonuclear leukocytes. It is a 55 kD cationic protein which has potent antibacterial activity against a broad range of Gram -ve bacteria. The sequence was used to generate the peptides (AAWOS851-W06074) which were screened for bactericidal activity against B.coli strains J5 and 0111:94 in a radial diffusion assay. The BPI peptides can be used to enhance the treatment of Gram -ve bacterial infections, prophylactically for patients about to undergo surgery or for disinfection or sterilisation. Administration of the BPI peptides together with an antibiotic results in synergistic or potentiating bactericidal effects greater than the effect of the individual peptide or antibiotic. Also the BPI peptides can reverse the resistance of certain Gram -ve bacteria to certain antibiotics e.g. carbenicillin, cefazolin. (Updated on 25-WAR-
               420
                                  361 PIGLIFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK 420
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                                                                                                         PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK
                                                                                    HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lipopolysaccharide binding protein; synergist; BPI; enhancement; bactericidal/permeability increasing protein; potentiation; surgery; Gram negative; bacterial infections; disinfection; sterilisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antibiotic; E.coli; polymorphonuclear leukocyte; mammalian
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              "mature recombinant BPI"
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/note= "m
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The recombinant BPI (bacterial permeability-increasing), is designated rBPI23. BPI peptides (AAR76244-458) were screened for bactericidal effects on E. coli strains J5 and 011:184 in a radial diffusion assay. BPI peptides which retain antibacterial activity are expected to improve the therapeutic effectiveness of antibiotics when concurrently administered. Concurrent administration of BPI protein products and antibiotics is Bhown to reverse resistance of a variety of gram-negative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BPI protein and an antibiotic in a medicament - for treatment of gram-negative bacterial infection.
                                BPI peptide; bacterial permeability-increasing peptide; bactericidal; therapeutic effectiveness; antibiotic; concurrent administration; reverse resistance; gram-negative bacteria.
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100.0%; Pred. No. 4.3e-229;
ive 0; Mismatches 0;
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/note= "mature recombinant BPI"
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                                                                                                                                                                1. .31
/note= "signal peptide"
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94US-00273401
Recombinant BPI holoprotein.
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11-JUL-1994;
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                                           Gaps
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                           Query Match
Best Local Similarity 100.0%; Pred. No. 4.3e-229,
Matches 487; Conservative 0; Mismatches 0;
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/label= signal
32. .487
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to correct PF
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                                                 Compsn. comprising bactericidal permeability increasing protein prod. and bactericidal activity enhancing poloxamer surfactant - useful for treating bacterial infections, and for inhibiting bacterial and fungal growth.
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                                                                                                                                                                                                                                                                           The known anti-microbial properties of bactericidal/permeability increasing protein (BPI) can be enhanced by administering the BPI with a stabilising protein (BPI) can be enhanced by administering the BPI with a stabilising polyoxypropylene-polyoxyethylene block copolymer (poloxamer). Therapeutic compositions pref. contain one of the poloxamers 333, 334, 335 or 403 and opt. comprise EDTA. They are useful for treating bacterial and fungal infections. The present sequence is that of human recombinant BPI and was disclosed in Gray et al., J.Biol.Chem., 264:9505 (1989)
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                                                                                                                                                                                                                       English.
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WPI; 1996-342029/34.
N-PSDB; AAT31853.
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Job time : 174.559 secs
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ALIGNMENTS

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Sequence 2, Ap Sequence 2, Ap Sequence 2, Ap Sequence 4, Ap Sequence 15,

Sequence 2, Ap Sequence 2, Ap Sequence 28, A

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APPLICANT: MILLEULLUM FRAITHER FARTHER APPLICANT: MILLEULLUM FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAITHER FRAIT
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Sequence 408, Application US/09759130B
Publication No. US20030022279A1
ENDIGATION NO. WARPLION:
APPLICANT: Millennium Pharmaceuticals, Inc.
Sequence 408, App
Sequence 38, Appl
Sequence 408, App
Sequence 1170, Ap
Sequence 265, App
Sequence 266, Appl
Sequence 206, Appl
Sequence 2, Appli
Sequence 2, Appli
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                         GenCore version 5.1.6
(c) 1993 - 2005 Compugen Ltd.
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US-09-765-527-265
US-09-760-397-16
US-09-881-490-206
US-09-942-021-2
US-09-733-613-2
US-09-728-938-2
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 2000000000
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66 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 125
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APPLICANT: MCCARTHY, Sean A
APPLICANT: BARNES, Thomas M
APPLICANT: FRASER, Christopher C
APPLICANT: FRASER, Christopher C
APPLICANT: FRASER, Christopher C
APPLICANT: SHARP, John D
TITLE OF INVENTION: NOVEL GENES ENCODING PROTEINS HAVING DIAGNOSTIC,
TITLE OF INVENTION: PREVENTIVE, THERAPEUTIC, AND OTHER USES
FILE REPERENCE: 10147-6U2
FILE REPERENCE: 10147-6U2
CURRENT FILING DATE: 2001-10-25
PRIOR PLICATION NUMBER: US 09/333,159
PRIOR FILING DATE: 1999-06-14
PRIOR FILING DATE: 2000-05-24
NUMBER OF SEQ ID NOS: 79
SOFTWARE: PATENTIN VET. 2.1
SOFTWARE: PATENTIN VET. 2.1
SENGTH: 483
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                                                                                                                                                                                                                                                                                                                                                                     100.0%; Score 943; DB 10;
100.0%; Pred. No. 3.4e-84;
ive 0; Mismatches 0;
  PRIOR FILING DATE: 1999-06-29
PRIOR APPLICATION NUMBER: US 09/608,452
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 2000-06-30
PRIOR PILING DATE: 1999-09-10
PRIOR PILING DATE: 1999-09-10
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 2000-06-23
PRIOR FILING DATE: 1999-10-19
NUMBER OF SEQ ID NOS: 460
SEQ ID NO 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; Sequence 38, Application US/10042431; Publication No. US20020182675A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 100.
Matches 184; Conservative
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ORGANISM: Homo mapiens
US-10-042-431-38
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ORGANISM: Homo sapiens
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PROJUCION BARRIES

APPLICANT BARRIES AND SERVING

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APPLICANT MICHAEL R

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BRICK RILING DATE: 2000-10-20/453

APPLICANT MARKEN US 09/479, 49

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APPLICANT MARKEN US 09/420, 497

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                                                          126 KASGNFDLSIECMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 185
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DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 125
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Sequence 1241, Application US/10473127

Publication No. US20040236091A1

GENERAL INFORMATION:
APPLICANT: Zycos Inc.
TITLE OF INVENTION: TRANSLATIONAL PROFILING
FILE REFERRNCE: 08191-026W01

CURRENT FILING DATE: 2003-09-26

PRIOR APPLICATION NUMBER: 60/279,495
                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION:
TITLE OF INVENTION:
TITLE OF INVENTION:
FILE REPRENCES:
CURRENT APPLICATION:
CURRENT FILING DATE: 2003-09-26
PRIOR APPLICATION NUMBER: 60/279,495
PRIOR APPLICATION NUMBER: 60/279,495
PRIOR APPLICATION NUMBER: 60/292,544
PRIOR APPLICATION NUMBER: 60/292,544
PRIOR APPLICATION NUMBER: 60/302,644
PRIOR FILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: 60/306,370
PRIOR FILING DATE: 2001-06-09
PRIOR FILING DATE: 2001-10-01
PRIOR APPLICATION NUMBER: 60/306,370
PRIOR FILING DATE: 2001-10-01
PRIOR FILING DATE: 2001-10-04
PRIOR FILING DATE: 2001-10-04
PRIOR FILING DATE: 2001-11-04
PRIOR FILING DATE: 2002-02-04
PRIOR FILING DATE: 2002-02-05
NUMBER OF SEQ ID NOS: 2041
SOFTWARE: FARESQ FOR WINDOWS VERSION 4.0
                                                                                                                                                                                                                                                         Sequence 1170, Application US/10473127; Publication No. US20040236091A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Homo sapiens
US-10-473-127-1170
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          126 KMSGNPDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 185
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APPLICANT: Better, Marc D.
TITLE OF INVENTION: Methods for Recombinant Microbial Production of
Fusion Proteins and BPI-Derived Peptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
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CORRESPONDED: 203
CORRESPONDED: 203
STREET: 6310 Sears Tower, 233 South Wacker Drive
STREET: 6310 Sears Tower, 233 South Wacker Drive
CITY: Chicago
STATE: 111inois
CONTY: United States of America
ZIP: 606.6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
COMPUTER: IBM PC Compatible
COMPUTER: BATCATION DATA:
APPLICATION NUMBER: US/09/765,527
FILING DATE: 18-Jan-2001
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/33199
TELECOMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
PRIOR APPLICATION NUMBER: 66/292,544
PRIOR FILING DATE: 2001-05-21
PRIOR PILING DATE: 2001-06-08
PRIOR PLING DATE: 2001-08-08
PRIOR PILING DATE: 2001-08-08
PRIOR FILING DATE: 2001-10-01
PRIOR FILING DATE: 2001-10-01
PRIOR FILING DATE: 2001-12-04
PRIOR PLING DATE: 2002-12-04
PRIOR PLING DATE: 2002-02-20
NUMBER OF SEQ ID NOS: 2041
SEQ ID NO 1241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 08/621,803
FILING DATE: «Unknown»
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 265, Application US/09765527 Patent No. US20020006638A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo sapiens
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RESULT 8
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Sequence 16, Application US/09760397

Sequence 16, Application US/09760397

GENERAL INFORMATION:

APPLICANT: Better, Marc D.

APPLICANT: Better, Marc D.

TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production

FILE REFERENCE: 1103/11041US01

CURRENT APPLICATION NUMBER: 103/09/760,397

CURRENT FILING DATE: 2001-01.12

FRIOR APPLICATION NUMBER: 09/211,970

FRIOR FILING DATE: 1999-03-18

NUMBER OF SEQ ID NOS: 16

SEGFWARE PATCHEL PATCHELLING OF SEQ ID NOS: 16

SEG ID NO 16
                                                                                                                                                                                                                                                                                             1 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
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                                                                                                                                                                                                                   100.0%; Score 943; DB 9; 100.0%; Pred. No. 3.5e-84;
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                                                                                                                                                                                                                                                          0; Mismatches
                                                                                  TYPE: amino acide
TYPE: amino acide
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 265:
US-09-765-527-265
          TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 265:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
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TELEFAX: 312/474-0448
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Best Local Similarity
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Best Local Similarity
Matches 184; Conserv
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ORGANISM: Human
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US-09-760-397-16
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LENGTH: 487
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121 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
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                                                                                                                                                 Fadem, Mitchell B.

TITLE OF INVENTION: Anti-Fungal Peptides

NUMBER OF SEQUENCES: 211

CORRESPONDENCE ADDRESS:

ADDRESSE: MCANDTews, Held & Malloy, Ltd.

STREET: 500 West Madison Street, 34th FloorDrive

CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                              MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
CERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: MCNicholas, Janet M.
REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 100-238/11021US01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA:

APPLICATION NUMBER: US(09/881,490
FILING DATE: 14-Jun-2001

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/119,858
FILING DATE: 13-JAN-95
APPLICATION NUMBER: 08/372,105
FILING DATE: 13-JAN-95
APPLICATION NUMBER: 08/273,540
FILING DATE: 15-SEP-94
APPLICATION NUMBER: 08/273,540
FILING DATE: 11-JUL-94
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-WAR-94
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-WAR-94
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-WAR-94
APPLICATION NUMBER: 08/093,222
FILING DATE: 11-WAR-94
APPLICATION NUMBER: 08/093,222
FILING DATE: 14-JAN-94
APPLICATION NUMBER: 08/093,222
FILING DATE: 14-JAN-94
                                                                                                                                                                                                                                                                                                                                      STATE: Illinois
COUNTRY: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 206:
US-09-881-490-206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 15-JUL-93
APPLICATION NUMBER: 08/030,644
FILING DATE: 12-MAR-93
                     Sequence 206, Application US/09881490
Patent No. US20020077298A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELECOMMUNICATION INFORMATION:
                                                                                                  APPLICANT: Little II, Roger G.
Lim, Edward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ 1D NO: 206:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
TYPE: amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 60661
COMPUTER READABLE FORM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similaricy
Matches 184; Conservative
JS-09-881-490-206
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DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
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130 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 189
                                                                                                                                                                                                                                                                                                                                                                       Wedel, Nancy
TITLE OF INVENTION: Human Therapeutic Uses of BPI Protein Products
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             70 DSFKIKHLGKGHYSFYSMDIREPQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL
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STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: CIN.CAGO
STATE: 111inois
COUDTRY: United States of America
COUDTRY: United States of America
ZIP: 66060-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/73,613
FILING DATE: 08-Dec-2000
CLASSIFICATION NATA:
APPLICATION NUMBER: 09/388,758
FILING DATE: 1999-09-02
ATTORNEY/AGENT INFORMATION:
NAME: Michael F. Borun
REGISTRATION NUMBER: 25,447
TELEPHONE: 312/474-6300
TELEPHONE: 312/474-6308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
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                                                                                                                                                                                                                                                                                                      Scannon, Patrick J.
van Deventer, Sander J.H.
von der Mohlen, Marijke A.M.
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MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
                                                                                                                                                                                                         Sequence 2, Application US/09733613
Patent No. US20020094952A1
GENERAL INFORMATION:
APPLICANT: Friedmann, Nadav
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEX: 25-3856
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                                                181 HKKI 184
                                                                                            190 HKKI 193
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  130 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGML1QLF 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
                                                                                                                                                                                                                                    Sequence 2, Application US/09942021
Patent No. US20020090368A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Little, Roger G. II
APPLICANT: Little, Roger Herapeutic Uses of Bactericidal/Permeability
IITLE OF INVENTION: Increasing (BPI) Protein Products
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/942,021
PILING DATE: 27-Aug-2001
CLASSIFICATION: Aunknown>
APPLICATION NUMBER: US/200,427
FILING DATE: 24-DEC-1998
APPLICATION NUMBER: 09/220,427
FILING DATE: March 31, 1995
APPLICATION NUMBER: 08/093,202
FILING DATE: Warch 12, 1993
APPLICATION NUMBER: 08/093,022
FILING DATE: Warch 12, 1993
APPLICATION NUMBER: 08/093,022
FILING DATE: Warch 12, 1993
APPLICATION NUMBER: 08/030,644
FILING DATE: Warch 12, 1993
ATTORNEY/ACENT INFORMATION:
NAME: MACNICHOLAS, Janet M.
REGISTRATION NUMBER: 32,918
REFERENCE/DOCKET NUMBER: 11004US07 / 100-224.P1.C3
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION INFORMATION:
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TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                      ADDRESSEE: MCANATews, Held & Malloy, Ltd. STREET: 500 W. Madison Street, 34th Floor CITY: Chicago STATE: 111inois COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
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Pred. No. 3.5e-84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: linear MOLECULE TYPE: protein SEQUENCE DESCRIPTION: SEQ ID NO: 2: US-09-942-021-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERRISTICS:
LENGTH: 487 amino acida
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: 312/707-9155
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CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ZIP: 60661
COMPUTER READABLE FORM:
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Best Local Similarity 100.
Matches 184; Conservative
                                                                                                                       190 HKKI 193
                                                                           HKKI 184
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US-09-942-021-2
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US-09-782-642-2
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                                                                                                                                                                                     Scannon, Patrick J.
TITLE OF INVENTION: Therapeutic Uses of BPI Protein Products for Human Meningococcemia
                                                                                                                                                                                                                                                                            CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicago.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Score 943; DB 9; Length 487;
100.0%; Pred. No. 3.5e-84;
tive 0; Mismatches 0; Indels (
                                                                                                                                                                                                                                                                                                                                                                                             CUMUNIES STATES OF AMERICA CONDUITER SEQUENCE STATES OF AMERICA COMPUTER READABLE FORM:

MEDIUM TYPES: FLOPPY disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/728,938
FILING DATE: 40-DEC-2000
CLASSICATION NUMBER: US/09/365,858
FILING DATE: 40-DROWN->
PRIOR APPLICATION NUMBER: US/09/365,858
FILING DATE: 40-DROWN->
APPLICATION NUMBER: US/09/365,858
FILING DATE: 40-DROWN->
APPLICATION NUMBER: US/09/365,858
RILING DATE: 40-DROWN->
APPLICATION NUMBER: US/09/365,858
RECISTRATION NUMBER: 31,873
ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
RECISTRATION NUMBER: 31,873
RECISTRATION NUMBER: 31,873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE/DOCKET NUMBER: 27129/33248
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                              STATE: Illinois
COUNTRY: United States of America
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: linear

MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-728-938-2
                                                                                                     Sequence 2, Application US/09728938
Patent No. US20020103114A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 487 amino acids
                                                                                                                                                                   APPLICANT: Giroir, Brett P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELEFAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: 2:
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Matches 184; Conservative
                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HKKI 184
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| HKKI 193
                                                              RESULT 11
US-09-728-938-2
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RESULT 12

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121 KMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKSKVGWLIQLF 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS
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0
Sequence 2, Application US/09782642
Patent No. US20020103118A1
GENERAL INFORMATION:
APPLICANT: Lewis H. Lambert, Jr.
APPLICANT: Lewis H. Lambert, Jr.
ITLE OF INVENTION: Treatment of Mycobacterial Diseases
Bactericidal/Permeability-Increasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
100.0%; Score 943; DB 9; Length 487;
Best Local Similarity 100.0%; Pred. No. 3.5e-84;
Matches 184; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READMELE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
COMPUTER: IBM PC compatible
SOFTWARE: PatentIN Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/782,642
FILING DATE: 13-P6-2001
CLASSIFICATION NUMBER: 08/626,646
FILING DATE: CUNKNOWN>
APPLICATION NUMBER: 08/626,646
FILING DATE: CUNKNOWN>
ATTORNEY/AGENT INFORMATION:
NAME: BOTUN, Michael F.
REGISCHARION NUMBER: 25,447
REFERENCE/CONCET WUMBER: 31293
                                                                                                                                                                                                                                                                                                                                   6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                             ADDRESSEE: Marshall, O'Toole, Gerstein, Murray
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                              Protein Product
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-255-245-2
; Sequence 2, Application US/09255245
; Patent No. US20020119918A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 487 amino acids
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INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                             Borun
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                                                                                                                                                                                                                                                                                                                                                                                       STATE: Illinois
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                   STREET: 6300 CITY: Chicago
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 HKKI 184
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Sears Tower, 233 South Wacker Drive
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INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
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                       THERAPEUTIC USES OF N-TERMINAL BPI PROTEIN PRODUCTS IN ANCA-POSITIVE PATIENTS
                                                        NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS: 2
CORRESPONDENCE ADDRESS: 3
CORRESPONDENCE ADDRESS: 3
CORRESSER: Marshall, O'Toole, Gerstein, Murray & Borun STREET: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicago
STATE: 111nois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/09/255,245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
100.0%; Score 943; DB 9; Length 487;
Best Local Similarity 100.0%; Pred. No. 3.5e-84;
Matches 184; Conservative 0; Mismatches 0; Indels
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CORRESPONDENCE ADDRESS:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
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Patent No. US20020128191A1

GENERAL INFORMATION:

APPLICANT: Scannon, Patrick J.

TITLE OF INVENTION: METHODS OF TREATING CONDITIONS
ASSOCIATED WITH CORNEAL INJURY
                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/742,985
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Rin-Laures, Li-Hsien
REGISTRATION NUMBER: 33,547
REFERENCE/DOCKET NUMBER: 2712
TELECOMMUNICATION INFORMATION:
TELECHONE: 312/474-6300
TELEFAX: 312/474-6448
      Carroll, Stephen F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
TYPE: amino acid
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                       TITLE OF INVENTION:
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
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                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
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US-09-941-198A-2
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Sequence 2, Application US/09866514

| Sequence 2, Application US/09866514
| Sequence 2, Application US/09866514
| Patent No. US20020137050A1
| Patent No. US20020137050A1
| GENERAL INFORMATION: THERAPEUTIC USES OF BACTERICIDAL/FERMEABILITY-INCREASING
| TITLE OF INVENTION: PROPIED REAGMENTS
| FILE REFERENCE: 28297/32248B
| CURRENT APPLICATION NUMBER: US/09/866,514
| CURRENT FILING DATE: 1999-05-10
| PRIOR APPLICATION NUMBER: 09/309,217
| PRIOR FILING DATE: 1999-05-10
| NUMBER OF SEQ ID NOS: 6
| SOFTWARE: Patentin Ver. 2.0
| TENGRAP OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND OF SECOND
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CITY: Chicago
COMPUTER: 111inois
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COMPUTER: 110inois
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MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-941-198A-2
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TYPE: amino acid
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100.0%; Score 943; DB 9; Length 487;
; ORGANISM: Homo sapiens
US-09-866-514-2
                                                            Query Match
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| | 0 | 9 | 69 | 120 | 129 |
| | 0; Сарв | KIPDYS | KIPDYS | AOKRFL | AOKRFL |
| : | °; | ELKRI | ELKRI | SGKWK | SGKWK |
| | Indels | SOCTAALOK | GOGTAALOK | SISNANIKI | SISNANIKI |
| 84 | Ö | DYAS | DYA | GLKI | GLKI |
| Rest Local Similarity 100.0%: Pred. No. 3.5e-84: | Matches 184; Conservative 0; Mismatches 0; Indels | 1 CNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKELKRIKIPDYS 60 | 10 CNAPRWYSLMYLVAIGTAVTAAVNPGVVVRISQKGLDYASQGGTAALQKELKRIKIPDYS 69 | 61 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 120 | 70 DSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISGKWKAQKRFL 129 |
| Pred | , Mir | AAVNPC | AAVNPO | REFOLE | REFOLE |
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| Best Local S | ches | | | | |
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Search completed: October 21, 2005, 11:37:02 Job time : 65.7154 secs

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Sequence 265, App
Sequence 16, Appl
Sequence 206, App
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                                                                                                                           October 21, 2005, 11:22:45 ; Search time 171.285 Seconds (without alignments) 1187.019 Million cell updates/sec
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2507
1 MRENMARGPCNAPRWVSLMV........nvvLQPHQNFLLFGADVVYK 487
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Published Applications Advisory Pubcoms. pep: 4. (cgn2_6/ptodata/1/pubpaa/us07_PUBCOMB.ppp: 4. (cgn2_6/ptodata/1/pubpaa/us07_PUBCOMB.pep: 4. (cgn2_6/ptodata/1/pubpaa/us06_PUBCOMB.pep: 4. (cgn2_6/ptodata/1/pubpaa/us06_PUBCOMB.pep: 4. (cgn2_6/ptodata/1/pubpaa/us07_NEW_PUB.pep: 4. (cgn2_6/ptodata/1/pubpaa/us08_PUBCOMB.pep: 4. (cgn2_6/ptodata/1/pubpaa/us08_PUBCOMB.pep: 4. (cgn2_6/ptodata/1/pubpaa/us08_PUBCOMB.pep: 4. (cgn2_6/ptodata/1/pubpaa/us09_PUBCOMB.pep: 4. (cgn2_6/ptodata/1/pubpaa/us08_PUBCOMB.pep: 4. (cgn2_6/ptodata/1/pubpaa/us08_PUBCOMB.pep: 4. (cgn2_6/ptodata/1/p
GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
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US-09-760-397-16
US-09-981-490-206
US-09-942-021-2
US-09-733-613-2
US-09-733-613-2
US-09-733-642-2
US-09-255-245-2
US-09-941-198A-2
US-09-866-514-2
US-09-861-400-15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SUMMARIES
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Maximum Match 100%
Listing first 45 summaries
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                                                                                      - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 2000000000
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Match Length
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                                                                                                                                                                                                                                             Perfect score:
                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                      OM protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database :
                                                                                                                                                                                                                                                                       Seguence:
                                                                                                                                                                                                                                                                                                                                                                                Searched:
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| Sequence 2, Appli Sequence 3, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 12, Appli Sequence 12, Appli Sequence 16, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 146, Appli Sequence 146, Appli Sequence 115, Appli Sequence 115, Appli Sequence 1151, Appli Sequence 1 | icrobial Production of erived Peptides Murray & Borun er Drive |
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| US-09-746-311-2 US-09-975-638B-3 US-09-416-828-2 US-10-206-527-2 US-10-206-810-2 US-10-128-139-2 US-10-126-810-2 US-10-126-810-2 US-10-136-460-2 US-10-136-460-2 US-10-136-460-2 US-10-136-413-2 US-10-136-413-2 US-10-34-182-16 US-10-34-182-16 US-10-34-182-16 US-10-34-182-16 US-10-34-182-16 US-10-34-182-16 US-10-359-913-2 US-10-359-913-2 US-10-359-913-3 US-10-373-127-1155 US-10-473-127-1159 US-10-473-127-1169 US-10-473-127-1169 US-10-473-127-1169 US-10-473-127-1169 US-10-473-127-1169 US-10-473-127-1161 | TormenTS Tor Recombinant M Toteins and BPI-D Toole, Gerstein, C, 233 South Wack The Syms-Dos See #1.0, Version 109/765,527 1129/33199 127129/33199 |
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Sequence 16, Application US/09760397

BENERAL INFORMATION:

APPLICANT: Better, Marc D.

TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production

TITLE OF INVENTION: Improved Methods for Recombinant Peptide Production

FILE REFERENCE: 1103/11041US01

CURRENT PILIOR DATE: 2001.01-12

PRIOR APPLICATION NUMBER: 09/271,970

PRIOR FILING DATE: 1999-03-18

NUMBER OF SEQ ID NOS: 16

SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                                   Length 487;
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                                                                                                                                                 Query Match 100.0%; Score 2507; DB 9; Best Local Similarity 100.0%; Pred. No. 1.7e-209; Matches 487; Conservative 0; Mismatches 0;
                              LENGTH: 487 amino acids
LENGTH: 487 amino acids
TYPE: amino acid
TYPE: paino acid
TOPOLOGY: linear
SEQUENCE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 265:
US-09-765-527-265
TELEX: 25-3856
INFORMATION FOR SEQ ID NO: 265:
SEQUENCE CHARACTERISTICS:
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ORGANISM: Human
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DB 9; Length 487;

100.0%; Score 2507;

Query Match

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STRET: 500 West Madison Street, 34th Floorbrive
CITY: Classo
STATE: 111inois
COUNTRY: United States of America
                       Indela
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Pred. No. 1.7e-209;
Mismatches 0;
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Fadem, Mitchell B.
TITLE OF INVENTION: Anti-Fungal Peptides
CORRESPONDENCE ADDRESS:
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MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Ve.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/881,490
FILING DATE: 14-Jun-2001
PRIOR APPLICATION DATA:
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FILING DATE: 4UDARDAN-2
PILING DATE: 13-JAN-95
FILING DATE: 13-JAN-95
APPLICATION NUMBER: 08/306,473
FILING DATE: 15-SEP-94
APPLICATION NUMBER: 08/203,540
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; Patent No. US20020077298A1
; GENERAL INFORMATION:
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al Similarity 100.0%; Po 487; Conservative 0;
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US-09-942-021-2
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NAME: MONIGOLDAS, Janet M.
REGISTRATION NUMBER: 32, 918
REFERENCE/DOCKET NUMBER: 100-238/11021US01
                                                                                                                                                                                                                                                                                                                                   Query Match
100.0%; Score 2507; DB 9;
Best Local Similarity 100.0%; Pred. No. 1.7e-209;
Matches 487; Conservative 0; Mismatches 0;
FILING DATE: 11-JUL-94
APPLICATION NUMBER: 08/209,762
FILING DATE: 11-MAR-94
APPLICATION NUMBER: 08/183,222
FILING DATE: 14-JAN-94
APPLICATION NUMBER: 08/093,202
FILING DATE: 15-JUL-93
APPLICATION NUMBER: 08/030,644
FILING DATE: 15-JUL-93
APPLICATION NUMBER: 08/030,644
                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein SEQ ID NO: 206: US-09-881-490-206
                                                                                                                                                                  TELECOMMUNICATION INFORMATION
TELEPHONE: 312/707-8889
TELEFAX: 312/707-9155
                                                                                                                                                                                                                                               LENGTH: 487 amino acids
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INFORMATION FOR SEQ ID NO: 206:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                            TYPE: amino acid
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US-09-942-021-2
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APPLICANT: Little, Roger G. II

Sequence 2, Application US/09942021 Patent No. US20020090368A1 GENERAL INFORMATION:

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VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 300
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TITLE OF INVENTION: Therapeutic Uses of Bactericidal/Permeability Increasing (BPI) Protein Products
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COMPUTER: IEM PC. COMPATION.
COMPATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION NUMBER: US/09/942,021
PLING DATE: 27-Aug-2001
CLASSIPICATION: CUNKNOWN:
PRIOR APPLICATION NUMBER: 09/220,427
PILING DATE: 24-DEC-1998
APPLICATION NUMBER: 09/415,158
FILING DATE: March 31, 1995
APPLICATION NUMBER: 08/415,158
FILING DATE: March 12, 1993
APPLICATION NUMBER: 08/030,644
FILING DATE: March 12, 1993
ATTORNEY/AGENT INCORMATION:
NAME: MCAINT INCORMATION:
NAME: MCAINTONION NUMBER: 32,918
REGISTRATION NUMBER: 32,918
REGISTRATION NUMBER: 11,004US07 / 100-224.PI.C3
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                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: MCANdrews, Held & Malloy, Ltd.
STREET: 500 W. Madison Street, 34th Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
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                                                                                                                                                                                                                                                 ZIP: 60661
COMPUTER READABLE FORM:
                                                                                                                                                             CITY: Chicago
STATE: Illinois
COUNTRY: USA
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KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS 180
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Patent No. US20020103114A1
GENERAL INFORMATION:
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TELEFAX: 312/474-0448
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INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
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US-09-728-938-2
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INVENTION: Human Therapeutic Uses of BPI Protein Products
                                                                HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF
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FILING DATE: 1999-09-02
ATTORNEY/AGENT INFORMATION:
NAME: Michael F. Borun
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/32451
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                      Scannon, Patrick J.
van Deventer, Sander J.H.
von der Mohlen, Marijke A.M.
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STATE: Illinois
COUNTX: United States of America
ZIP: 60606-6402
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MOLECULE TYPE: protein

SEQUENCE DESCRIPTION: SEQ ID NO:
US-09-733-613-2
                                                                                                                                                                                                                                         Sequence 2, Application US/09733613
Patent No. US200200094952A1
GENERAL INFORMATION:
APPLICANT: Friedmann, Nadav
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NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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Matches 487; Conserva
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241 VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV
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                                                                  KVGWLIQLFHKKIESALRNKMNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL
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Scannon, Patrick J.
TITLE OF INVENTION: Therapeutic Uses of BPI Protein Products
for Human Meningococcemia
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ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
STREET: 6300 Sears Tower, 233 South Wacker Drive
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ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
REPERENCE/DOCKET NUMBER: 27129/33248
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Chicago
STATE: 1111nois
COUNTRY: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Ver
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/728,938
FILING DATE: 30-Dec-2000
CLASSIFICATION: <Unknown>
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FILING DATE: <Unknown>
APPLICATION NUMBER: 08/927,437
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ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Borun
STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                    100.0%; Score 2507; DB 9; 100.0%; Pred. No. 1.7e-209;
                                                            REFERENCE/DOCKET NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 31293
TELECHMONICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-6448
TELER: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LRNGTH. A
                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                         TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO:
                                                                                                                                                                 LENGTH: 487 amino acids
TYPE: amino acid
                                                      NAME: Borun, Michael F. REGISTRATION NUMBER: 25
                APPLICATION NUMBER: 08,
FILING DATE: <UNKNOWN>
ATTORNEY/AGENT INFORMATION:
       PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                Best Local Similarity 100.
Matches 487; Conservative
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US-09-782-642-2
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                                                                                                                                                                  KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPUVGLKFSISNANIKISG
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                                                                              Gaps
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                                                        Length 487;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Lewis H. Lambert, Jr.
IITLE OF INVENTION: Treatment of Mycobacterial Diseases
by Administration of
Bactericidal/Permeability-Increasing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & STREET: 6300 Sears Tower, 233 South Wacker Drive CITY: Chicago STATE: 1111nois
                                                                              Indels
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100.0%; Pred. No. 1.7e-209;
iive 0; Mismatches 0;
; MOLECULE TYPE: protein
; SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-728-938-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Protein Product
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/09782642 Patent No. US20020103118A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS
                                                Query Match
Best Local Similarity 100.
Marches 487; Conservative
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GADVVYK 487
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US-09-782-642-2
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KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG 120 YQBAGVLKMTLRDDMI PKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360 YQEAGVLKMTLRDDMI PKESKFRLTTKFFGTFLPEVAKKFPNWKIQIHVSASTPPHLSVQ 360 PTGLTFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK 420 HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF 480 KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG 241 VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 421 HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLFTPARVQLXNVVLQPHQNFLLF 1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS VAPPATTAETLDVQMKGEFYSENHHNPPPFFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL KVGWLIQLFHKKIESALRNKMNSQVCEKVTNSVSSKLQPYPQTLPVMTKIDSVAGINYGL Gaps ö Length 487; Indels RESULT 8
US-09-255-245-2
Squence 2, Application US/09255245
Squence 2, Application US/09255245
SAUGHOL 2, Application US/09255245
SAUGHOL 1 INFORMATION:
THE OF INVENTION: THERAPEUTIC USES OF N-TERMINAL BPI TITLE OF INVENTION: PRODUCTS IN ANCA-POSITIVE PATIENTS
NUMBER OF SEQUENCES:
CORRESPONDENCES:
ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & Boru

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100.0%; Pred. No. 1.7e-209;
iive 0; Mismatches 0;
                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC Compatible
COMPUTER: Ploppy disk
COMPUTER: IEM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/255,245
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
PRIOR DATE:
FILING DATE:
                                                                                                                                                                                                              CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: RIN-Laures, Li-Hsien
REGISTRATION NUMBER: 33,547
REFERENCE/DOCKET NUMBER: 31,547
REFERENCE/DOCKET NUMBER: 27129/33565
TELECOMMINICATION INFORMATION:
TELERAX: 312/474-6300
TELERAX: 25-3856
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CARACTERISTICS:
LENGTH: 487 amino acids
TYPE: amino acid
STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
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Best Local Similarity 100.
Matches 487; Conservative
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MOLECULE TYPE: protein
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                                                                                                                                                                                                               ADDRESSEE: Marshall, O'Toole, Gerstein, Murray &
                                                                                                                                                                                                                                                               STREET: 6300 Sears Tower, 233 South Wacker Drive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Version #1.25
                                                                                                                    METHODS OF TREATING CONDITIONS ASSOCIATED WITH CORNEAL INJURY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Score 2507; DB 9;
; Pred. No. 1.7e-209;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                 CITY: Chicago
STATE: Illinois
COUNTYR: United States of America
ZIP: 60606-6402
COMPUTER READABLE FORM:
MEDUNG TYPE: Ploppy disk
COMPUTER: IBM PC Compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Vers
CURRENT APPLICATION DATA:
FILING DATE: 27-Aug-2001
CLASSIFFCATION: AUKNOWN:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME: Borun, Michael F.
REGISTRATION NUMBER: 25,447
REFERENCE/DOCKET NUMBER: 27129/33006
TELECOMMUICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFRAX: 312/474-0448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 08/557,289
FILING DATE: «UNKNOWN»
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                 Sequence 2, Application US/09941198A Patent No. US20020128191A1 GENERAL INFORMATION:
APPLICANT: Scannon, Patrick J. TITLE OF INVENTION: METHODS OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 487 amino acids
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INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS
                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                              Borun
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JS-09-941-198A-2
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                                                                                                                                         APPLICANT: SCOLE, Randal W
APPLICANT: MATTAL MATIAN N
ATTLE OF INVENTION: RECOMBINANT ENDOTOXIN-NEUTRALIZING PROTEINS
FILE REFERENCE: 1103/113070301
CURRENT APPLICATION NUMBER: US/09/861,400
CURRENT FILING DATE: 2001-05-18
PRIOR APPLICATION NUMBER: 08/431,517
PRIOR FILING DATE: 1995-05-01
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PATENTIN VET: 2.1
SOFTWARE: PATENTIN VET: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 487;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
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100.0%; Score 2507; DB 9;
Best Local Similarity 100.0%; Pred. No. 1.7e-209;
Matches 487; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                            FEATURE: OTHER INFORMATION: human BPI amino acid (Figure 5)
                                                                                           ; Sequence 15, Application US/09861400; Patent No. US20020146761A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: SIGNAL
; LOCATION: (1)..(31)
; NAME/KEY: CHAIN
; LOCATION: (32)..(487)
US-09-861-400-15
481 GADVVYK 487
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ORGANISM: human
                                                                               US-09-861-400-15
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                                                                                                                                                                                                                                                                      Sequence 2, Application US/09866514;
Fatent No. US20020137050A1
GENERAL INFORMATION:
APPLICANT: Elsbach and Weiss
TITLE OF INVENTION: THERAPEUTIC USES OF BACTERICIDAL/PERWEABILITY-INCREASING
TITLE OF INVENTION: THERAPEUTIC USES OF BACTERICIDAL/PERWEABILITY-INCREASING
TITLE OF INVENTION: PROTEIN FRAGMENTS
FILE REFERENCE: 28297/322488
CURRENT APPLICATION NUMBER: US/09/866,514
CURRENT FILING DATE: 1999-05-10
FRIOR APPLICATION NUMBER: 09/309,217
FRIOR APPLICATION NUMBER: 09/309,217
FRIOR FILING DATE: 1999-05-10
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PATENTIN VEY: 2.0
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Best Local Similarity 100.0%; Pred. No. 1.7e-209;
Matches 487; Conservative 0; Mismatches 0;
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; ORGANISM: Homo sapiens
US-09-866-514-2
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US-09-866-514-2
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STATE: Illinois
COUNTRY: United States of America
ZIP: 60606-6402
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                                                         TYPE: PRT
ORGANISM: Homo sapiens
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, NUMBER OF SEQ ID NOS
, SOFTWARE: Patentin V
, SEQ ID NO 3
, LENGTH: 487
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US-09-416-828-2
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                                                      APPLICATE: Little, II, Roger G.

TITLE OF INVENTION: IDENTIFICATION OF NOVEL ANTIMICROBIAL AGENTS USING TITLE OF INVENTION: IDENTIFICATION OF NOVEL ANTIMICROBIAL AGENTS USING TITLE OF INVENTION: METABOLIC OXIDATION-REDUCTION INDICATOR DYES CURRENT APPLICATION NUMBER: US/09/746,311

CURRENT FILING DATE: 2001-09-10

PRIOR FAPLICATION NUMBER: 60/143,290
PRIOR FILING DATE: 1999-07-12
NUMBER OF SEQ ID NOS: 6
SOFTWARE: PATENTIN Ver. 2.1
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100.0%; Pred. No. 1.7e-209;
ive 0; Mismatches 0;
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Publication No. US20030166528A1
GENERAL INFORMATION:
APPLICANT: Lin, Jong Jye
FILE REFERENCE: 27129/37753
CURRENT APPLICATION NUMBER: US/09/975,638B
CURRENT FILING DATE: 2001-10-11
PRIOR APPLICATION NUMBER: 60/239,709
PRIOR FILING DATE: 2000-10-11
US-09-746-311-2; Sequence 2, Application US/09746311; Publication No. US20030017143A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 487; Conservative
                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
US-09-746-311-2
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US-09-975-638B-3
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LENGTH: 487
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Publication No. US20030171265A1
GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: Method of Treating Conditions Associated with
TITLE OF INVENTION: Intestinal Ischemia/Reperfusion
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSE: Marshall, O'Toole, Gerstein, Murray & Borun
STREDT: Gilo Sears Tower, 233 South Wacker Drive
CITY: Chicago
                                                          ö
Query Match
Best Local Similarity 100.0%; Score 2507; DB 10; Length 487;
Best Local Similarity 100.0%; Pred. No. 1.7e-209;
Matches 487; Conservative 0; Mismatches 0; Indels 0;
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WEDIUM TYPE: Floppy disk

COMPUTER: IBM PC Compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/416,828

FILING DATE:
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ADDRESSEE: Marshall, O'Toole, Gerstein, Murray & STREET: 6300 Sears Tower, 233 South Wacker Drive
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                                                                                                                                                                                                                                                                                                                                 NAME: Rin-Laures, Li-Hsien
REGISTRATION NUMBER: 33,547
REFERENCE/DOCKET NUMBER: 27129/34309
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                               APPLICATION NUMBER: US/08/962,217
FILING DATE: «Unknown»
APPLICATION NUMBER: 08/742,986
FILING DATE: 1-NOV-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY: linear
MOLECULE TYPE: protein
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acids
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TELEFAX: 312/474-0448
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INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: amino acid
                STREET: 6300 S
CITY: Chicago
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US-09-480-234-2
; Sequence 2, Application US/09480234
; Publication No. US20030194377A1
; GENERAL INFORMATION:
; APPLICANT: Carroll, Stephen F.
; Scannon, Patrick J.
; Gavit, Patrick D.
; TITLE OF INVENTION: IMPROVED THERAPEUTIC USES OF BPI PROTEIN
; PRODUCTS IN CYSTIC FIBROSIS PATIENTS
                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                100.0%; Score 2507; DB 10; Length 487; 100.0%; Pred. No. 1.7e-209; ive 0; Mismatches 0; Indels 0;
                                                                                                             27129/32043
             PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/756,164
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Sharp, Jeffrey S.
REGISTRATION NUMBER: 31,879
REGISTRATION INFORMATION:
TELECOMMUNICATION INFORMATION:
TELEPHONE: 312/474-6300
TELEFAX: 312/474-6448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                    487 amino acids
                                                                                                                                                                       TELEX: 25-3856
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 487 amino acid
                                                                                                                                                                                                                                                                                                                                                 Matches 487; Conservative
                                                                                                                                                                                                                                                  TOPOLOGY: linear;
MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GADVVYK 487
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GADVVYK 487
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Best Local Similarity
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KVGWLIQLFHKKIESALRNKWNSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL 240 HSNIGPPVELLODIMNYIVPILVLPRVNEKLOKGFPLPTPARVQLYNVVLQPHQNFLLF 480 KRIKIPDYSDSFKIKHLGKGHYSFYSMDIREFQLPSSQISMVPNVGLKFSISNANIKISG 120 KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS 180 180 KVGWLIQLFHKKIESALENKANSQVCEKVTNSVSSKLQPYFQTLPVMTKIDSVAGINYGL 240 VAPPATTAETLDVOMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 300 241 VAPPATTAETLDVQMKGEFYSENHHNPPPFAPPVMEFPAAHDRMVYLGLSDYFFNTAGLV 300 YQEAGVLKMTLRDDMIPKESKFRLTTKFFGTFLPEVAKKFPNMKIQIHVSASTPPHLSVQ 360 PTGLIFYPAVDVQAFAVLPNSSLASLFLIGMHTTGSMEVSAESNRLVGELKLDRLLLELK 420 HSNIGPFPVELLQDIMNYIVPILVLPRVNEKLQKGFPLPTPARVQLYNVVLQPHQNFLLF 480 9 KWKAQKRFLKMSGNFDLSIEGMSISADLKLGSNPTSGKPTITCSSCSSHINSVHVHISKS 1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQCGTAALQKEL 1 MRENMARGPCNAPRWVSLMVLVAIGTAVTAAVNPGVVVRISQKGLDYASQQGTAALQKEL Gaps ö Length 487; Indels

481 GADVVYK 487 ||||||| 481 GADVVYK 487 දු පු

Search completed: October 21, 2005, 11:37:01 Job time: 174.285 8ec8

me

From:

Chan, Christina

Sent: To: Thursday, October 20, 2005 5:15 PM Mitra, Rita; STIC-Biotech/ChemLib

Subject:

RE: SEQ search request 10/629516

Please rush Thanks Chris

Chris Chan

TC 1600 New Hire Training Coordinator and SPE 1644 (571)-272-0841 Remsen, 3E89

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OCT 21 2005

IZCH/CKEH, DIVI
(STIC)

----Original Message----

From:

Mitra, Rita

Sent: To: Thursday, October 20, 2005 4:16 PM

TU:

Chan, Christina

Subject:

SEQ search request 10/629516

I need your approval for this search request.

I would like to request an expedited sequence search for this case because it is due this bi-week. Please search commercial and published patent databases.

10/629516

SEQ ID NO: 2,

SEQ ID NO: 2, amino acids 10-193

Please print out the result.

Thanks. Rita

Rita Mitra, Ph.D.
Patent Examiner, Art Unit 1653
U.S. Patent and Trademark Office
Remsen Bldg, Rm 3B65
Alexandria, VA 22313
3070
(571)272-0954

E-mail: rita.mitra@uspto.gov

| Searcher: |
|--------------------------|
| Searcher Phone: |
| Date Searcher Picked up: |
| Date completed: |
| Searcher Prep Time: |
| Online Time: |

| . , , , , , , , , , , , , , , , , , , , | | | | | | |
|---|---------|-------------|---|--|--|--|
| Type of Search | | | | | | |
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| S/L: Oligomer: | | | | | | |
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| Struct | ure #:_ | Text: | _ | | | |
| Invent | tor: | Litigation: | _ | | | |
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| Vendors and cost where applicable |
| STN: |
| DIALOG: |
| QUESTEL/ORBIT: |
| LEXIS/NEXIS: |
| SEQUENCE SYSTEM: |
| WWW/Internet: |
| Other (Specify): |

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